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THIRTY-THIRD

QUARTERLY REPORT

OF THE

EPARTMENT OF PUBLIC WORKS

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING MARCH 31, 1891.

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REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., April 1, 1891.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the thirty-third quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and the cost of same for the quarter ending March 31, 1891.

March 2d the undersigned, who had been appointed by the Mayor and approved by the Board of Aldermen Commissioner of Public Works, in conformity with Chapter 869 of the public laws, after taking the oath of office, entered upon his duties.

WATER WORKS.

January 2d, the proposal of Fuller Iron Works to furnish special castings, service boxes and castings for sewers required during 1891, was accepted, and a contract was subsequently executed.

January 8th, the proposal of R. D. Wood & Co., of Philadelphia, to furnish cast-iron water pipes, was accepted and a contract subsequently executed, as follows:

9 tons 4-inch class A pipe.
538 tons 6-inch class B pipe.
95 tons 8-inch class A pipe.
105 tons 8-inch class B pipe.
91 tons 12-inch class B pipe.
36 tons 30-inch class B pipe.

Amount, ... $23,947 60

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March 3d, the offer of Harrison Hallett to do painting at Hope Pumping Station was accepted. Amount, $590.00.

March 11th, the offer of Hopkins, Pomroy & Co. to furnish teams for the season of 1891 for the water and sewer departments was accepted.

March 24th, the offer of Thomas Phillips & Co. to furnish five tons of pig lead and five tons of lead pipe was accepted.

March 24th, the offer of L. H. Tillinghast to furnish five tons of lead pipe was accepted.

The average daily consumption of water during the last quarter was 6,535,941 gallons.

Water pipes were laid during the quarter, as follows:

12-INCH.

In Douglas avenue..... 787.53 feet.

8-INCH.

In Eddy street, Chalkstone avenue, and in Plainfield street, Town of Johnston.....1,720.15 feet.

6-INCH.

In Aurora, Baker, Chambers, Lawn, Lisbon, Messenger, Mount Vernon, Payton, Plain, Spencer, Tefft and Waldo streets, Grotto and Young Orchard avenues, Rodgers court, and in Howard street, Town of Johnston.....3,945.69 feet.

Total.....6,453.37 feet,

or 1.22+miles.

Water pipes were removed during the quarter, as follows:

8-INCH.

In Chalkstone avenue..... 162 feet,

or .03+ miles.

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Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.	feet.
30-inch	59,637.	feet.
24-inch	43,418.92	feet.
20-inch	9,626.59	feet.
16-inch	31,746.36	feet.
12-inch	69,966.76	feet.
10-inch	14,471.76	feet.
8-inch	173,158.63	feet.
6-inch	787,786.61	feet.
Total	1,199,896.63	feet.

or 227.25+miles.

Three fire hydrants were set during the quarter, one in each of the following locations:

Douglas avenue, northerly side, about 240 feet west from Lewis street.
Eddy street, east side, at the north corner of Porter street.
Payton street, north side, about 250 feet west of Broad street.

The total number of fire hydrants is now thirteen hundred and sixty-six; thirteen hundred and fifty-four flush and twelve post hydrants.

The work of laying the following list of water pipes was in process at the close of the quarter:

No. of resolution.	Date of approval.	
365.	July 18, 1888,	*Mount Pleasant avenue, extension from Chalkstone avenue to Smith street. 1,213.5 feet of 12-inch pipe laid; the balance cannot be properly laid until the street is graded.*
121.	March 6, 1891.	*Cranston street, Cranston, from present end of pipe to Elm street, Cranston.*

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Work had not commenced upon laying water pipes in the following streets, March 31, 1891:

No. of resolution.	Date of approval.			
492.	Aug.	4,	1890,	*Chalkstone and Winthrop avenues.*
557.	Sept.	20,	"	*Hartford street, Johnston, from end of pipe at Alverson avenue, westerly.*
671.	Nov.	10,	"	*Chalkstone and Standish avenues.*
672.	"	"	"	*Vermont street, Johnston, from Manton avenue, northerly.*
693.	"	22,	"	*Hartford road, Johnston, from end of pipe to Rocky Hill avenue.*
774.	Jan.	3,	1891,	*Concord street and Laurel Hill avenue, Johnston.*
775.	"	"	"	*High street, Hartford road and Rocky Hill avenue, Johnston.*
776.	"	"	"	*Old Killingly road, Johnston, from Pettis avenue, northwesterly.*
59.	Feb.	2,	"	*Gray street, from end of pipe northerly.*
123.	Mar.	6,	"	*River avenue, from Chalkstone avenue to Smith street.*
142.	"	21,	"	*Burrington street, from end of pipe westerly to David street.*
144.	"	"	"	*Narragansett avenue, from end of pipe southerly.*
145.	"	"	"	*Ontario street, from Melrose easterly.*
146.	"	"	"	*Rounds avenue, from Narragansett avenue westerly.*
147.	"	"	"	*Seabury street, from Potter's avenue southwesterly.*

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During the quarter one hundred and seventy-two water meters were set, of which number twelve were to replace other meters. The use of seven meters was discontinued.

The following meters were in use at the close of the quarter:

Kind.	Size.							Total.
	⅝-in.	¾-in.	1-in.	1½in.	2-in.	3-in.	4-in.	
Ball & Fitts, piston	3,025	593	145	41	6	.....	.....	3,810
Ball & Fitts, rotary	.....	.....	22	24	3	5	3	57
Crown	4,534	636	168	76	20	6	4	5,444
Fales, Jenks & Sons	1	1	1	.....	.....	.....	.....	3
Thomson	92	9	.....	3	.....	.....	.....	104
Worthington	18	1	.....	.....	1	.....	1	21
	7,670	1,240	336	144	30	11	8	9,439

Sixty-three plumbers' licenses were issued during the quarter, all of which expire December 31, 1891.

Four hundred and twenty-nine permits to do plumbing work were issued during the quarter.

Seventy-two applications for water were made during the quarter, making the total number March 31, 1891, sixteen thousand five hundred and sixty-two.

The number of new service stops opened during the quarter was eighty-nine.

The total number of service stops opened to March 31, 1891, inclusive, was fifteen thousand nine hundred and nine. The number in actual use March 31, 1891, was fourteen thousand nine hundred and eleven.

The amount of bills approved on account of water works from January 1 to March 31, 1891, inclusive, was:

For construction and extension, . . . $26,687 99

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Classified as follows:

Fruit Hill reservoir, for repairs	$7,904 69	
Cast-iron water pipe	5,703 45	
Fire hydrants, boxes and covers	3,713 40	
Service pipe	2,249 93	
Stop valves	1,953 75	
Laying water pipes	1,558 50	
Special castings	1,528 53	
Rent of wharf and pipe yard	625 00	
Laying service pipes	520 83	
Tools	223 20	
Fruit Hill reservoir, for construction	202 50	
Barn expenses	183 75	
Wharf salaries	175 00	
Horses, wagons, harnesses, etc	81 46	
Labor on and carting pipe	64 00	
	$26,687 99	

For maintenance, ... $15,095 49

Classified as follows:

PETTACONSET PUMPING STATION.

Engineers	$625 00	
Sundries	557 45	
Firemen	450 00	
Superintendence	250 00	
Coal and wood	219 81	
Lights	195 25	
Labor on fuel	150 00	
Corliss pumping engine and house	90 38	
Oil, waste and packing	71 80	
Barn expenses	55 62	
Care of grounds	54 60	
Cornish pumping engine	36 00	
Real estate	8 83	
		2,764 74

SOCKANOSSET RESERVOIR.

Watchman	$135 00	
Sundries	86 44	
		221 44
Amount carried forward		$2,986 18

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Amount brought forward		$2,986 18

Hope Pumping Station.

Engineers	$575 00	
Firemen	494 40	
Hope pumping engine, No. 2	362 53	
Sundries	215 16	
Care of grounds	204 41	
Lights	130 75	
Oil, waste and packing	52 41	
Hope pumping engine, No. 1	17 06	
Coal and wood	12 08	
		2,063 80

Hope Reservoir.

Watchman	$202 50	
Sundries	6 60	
		209 10

Pipe Line and Service Stops.

Repairs	$1,085 82	
Superintendence—salaries	650 00	
		1,735 82

Meter Department.

Water meters	$3,105 14	
Setting and repairing meters	917 91	
		4,023 05

Miscellaneous.

Clerks' and inspectors' salaries	$3,184 23	
Town of North Providence, tax	400 00	
Barn expenses	153 56	
Telephone lines	122 14	
Analyses of water	96 15	
Public drinking fountains and troughs	67 16	
Pipe yard, office expenses	20 81	
Sundries	18 83	
Horses, wagons, harnesses, etc	14 66	
		4,077 54
		$15,095 49

The amount of expenditures from January 1 to March 31, 1891, inclusive, was . . $41,783 48

The total expenditures to March 31, 1891, inclusive, were $7,198,116 88

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The *net* expenditure for construction and extension from January 1 to March 31, 1891, inclusive, was	$26,439 86
The *net* expenditure for construction and extension to March 31, 1891, inclusive, was	5,599,937 14
The *net* expenditure for maintenance from January 1 to March 31, 1891, inclusive, was	10,620 12
The *net* expenditure for maintenance to March 31, 1891, inclusive, was	993,279 18

Bills deposited with the city treasurer for collection from January 1 to March 31, 1891, inclusive, amounted to . . . $300,189 19

As follows:

Water	$295,299 23
Water meters	3,090 50
Setting and repairing water meters	1,222 35
Rent of real estate	233 02
Penalties	164 00
Labor and materials, laying service pipes, etc.	119 98
Cast-iron water pipes	78 11
Permanently closing service stops	60 00
Manure from pipe yard barn	12 00
	$300,189 19

During the quarter coupons from bills collected have been returned by the city treasurer, and receipted for, amounting to . . . $299,585 07

As follows:

Water	$294,697 57
Water meters	3,052 00
Setting and repairing water meters	1,140 35
Labor and materials, laying service pipes, etc.	236 13
Rent of real estate	233 02
Penalties	164 00
Permanently closing service stops	50 00
Manure from pipe yard barn	12 00
	$299,585 07

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SEWERS.

During the quarter ending March 31, 1891, seventy-three permits were issued to drain layers; thirty for new work, and forty-three for extension and repair of drains.

Twenty-four drain-layer's licenses were issued during the quarter, all of which expire December 31, 1891.

January 6th, the proposal of H. R. Horton to furnish the cement required during the season of 1891, exclusive of that needed for the improved sewerage system, delivered on the work, was accepted, and a contract subsequently executed.

January 8th, a contract was executed with the New England Steam Brick Company to furnish one million first quality and two hundred thousand second quality sewer brick, delivered in this city, for the improved sewerage system.

January 14th, the proposal of Manchester & Hudson to furnish sewer pipes, etc., delivered in this city, was accepted, and a contract was subsequently executed. Amount, $8,642.50.

January 14th, the proposal of Charles M. Kelly, Jr., to furnish flagstones, delivered in this city, was accepted, and a contract subsequently executed. Amount, $712.50.

January 14th, the proposal of John Garvey to furnish one hundred sets of catch basin stones, delivered in this city, was accepted, and a contract subsequently executed. Amount, $2,500.00.

January 14th, the proposal of the New England Steam Brick Company to furnish eight hundred thousand brick, was accepted and a contract subsequently executed.

February 24th, a contract was executed with Connley Brothers, of Barrington, Rhode Island, to furnish six hundred thousand brick.

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March 31st, assessments for cost of constructing sewers were certified to the city treasurer, as follows:

Western street	$559 09
Villa avenue	341 78
Smith street, 100 feet west of Park street	248 42
Smith street, westerly	692 49
Common street	388 28
Mulberry street	1,053 00
Doyle avenue	3,964 37
Doyle avenue, easterly	773 12
Charles street	1,412 07
Young Orchard avenue	669 86
West Exchange and Ridge streets	12,136 46
Total	$22,238 94

February 14th, contracts for the construction of sewers, which were subsequently signed, were awarded as follows, namely:

[The amounts given below are what are estimated will be paid the contractors for labor, and do not include cost of inspection and materials, (except cement,) or rock excavation.]

To Moulton, O'Mahoney & Trumbull.

Disposal Division, Section 1, Improved Sewerage System, ... $50,052 50

Elmwood Division, Section 2, Improved Sewerage System, ... $83,008 26

During the quarter the construction of the following sewers was completed, namely:

No. of resolution.	Date of approval.		Date of completion
678.	Nov. 17, 1890.	Young Orchard avenue from Governor street to Ives,	Jan. 7, 1891.

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At the close of the quarter work upon the following sewers was in progress, namely:

No. of resolution.	Date of approval.	
552.	Sept. 20, 1890,	*Joslin street, from Atwell's avenue to Amherst street.*
		Disposal Division, Section 1, Improved Sewerage System.
		Elmwood Division, Section 2, Improved Sewerage System.
		Elmwood Division, Section 5, Improved Sewerage System.
		Elmwood Division, Section 7, Improved Sewerage System.
		Elmwood Division, Section 8, Improved Sewerage System.

Work upon the following sewers, completing the work ordered by the city council, had not commenced March 31, 1891, viz.:

No. of resolution.	Date of approval.	
395.	June 21, 1890,	*Harvard avenue, from Taylor street, westerly.*
431.	July 8, "	*Irving avenue, from Taber to Arlington.*
550.	Sept. 20, "	*Broad street, from Stewart to Summer.*
551.	" " "	*Dale street, from Atwell's avenue to West Exchange street.*
667.	Nov. 10, "	*Meader street, from Almy to Harkness.*
703.	Dec. 1, "	*Smith street, from State to Charles, and also to the river.*
715.	" 6, "	*Eddy street, from Tallman to Ship street.*
716.	" " "	*Vinton street, from Asia to Atwell's avenue.*
740.	" 22, "	*Manton avenue, from Amherst to Joslin street.*

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No. of resolution.	Date of approval.	
751.	Dec. 29, 1890,	*Dodge and Cranston streets, from summit in Dodge street to Codding street.*
771.	Jan. 3, 1891,	*Knight street, from summit to Cranston street.*
55.	Feb. 2, "	*Dexter street, from Cranston to Potter's avenue.*
56.	" " "	*Hamilton, Irving and Melrose streets.*
57.	" " "	*Humboldt and Wayland avenues; thence through land deeded to the city to Butler avenue; thence through Blackstone Park to Seekonk River.*
79.	" 5, "	*Prospect street, from Halsey to Hidden.*
80.	" " "	*Warren street, from Fuller to Dexter.*
139.	March 21, "	*Brownell street, from summit to Holden.*
140.	" " "	*Irving avenue, from Arlington to Taber.*
141.	" " "	*Smith, Davis and Jefferson streets.*

Bills approved on account of sewers from January 1 to March 31, 1891, inclusive, amounted to

For construction, ... $61,477 84

Charged as follows:

Materials	$14,723 84
Tools	4,493 25
Sundries, improved sewerage system	692 45
Testing cement	403 15
Sewer in Joslin street, from Atwell's avenue to Amherst street	1,351 14
Sewer in Young Orchard avenue, from Governor street to Ives	1,401 54
Amount carried forward	$23,065 37

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Amount brought forward	$23,065 37	
Sewer in Disposal Division, Section 1	5,859 34	
Sewer in Elmwood Division, Section 2	7,329 87	
Sewer in Elmwood Division, Section 5	21,371 65	
Sewer in Elmwood Division, Section 6	252 37	
Sewer in Elmwood Division, Section 7	847 28	
Sewer in Elmwood Division, Section 8	1,021 71	
Sewer in Elmwood Division, Section 9	600 25	
Contract reservations	1,130 00	
	$61,477 84	

For maintenance, ... $4,669 83

Charged as follows:

Cleaning basins and sewers	$1,810 55	
Repairing basins and sewers	702 49	
Cleaning and repairing old drains	460 87	
Barn expenses	377 94	
Salary—superintendent	350 00	
Horses, wagons, harnesses, etc	280 56	
Tools	271 70	
Inspection of connections	250 00	
Filling cisterns, etc	59 45	
Cleaning private connections	44 79	
Telephone lines	39 75	
Sundries	21 73	
	$4,669 83	

The *net* expenditure for construction of sewers to March 31, 1891, inclusive, was	$2,235,168 99
The *net* expenditure for maintenance of sewers to March 31, 1891, inclusive, was	321,530 89

Bills deposited with the city treasurer for collection, from January 1 to March 31, 1891, inclusive, amounted to $160 72

As follows:

Cleaning private connections	$92 47
Filling cisterns, etc	61 15
Making connection with sewer	6 50
Old hose	60
	$160 72

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During the quarter, coupons from bills collected have been returned by the city treasurer, and receipted for, amounting to . . . $198 00

As follows:

Cleaning private connections	$92 47
Filling cisterns, etc	81 73
Catch basin stones	20 00
Old manhole frame and cover	3 20
Old hose	60
	$198 00

HIGHWAYS.

One permit to open street was issued during the quarter.

March 3d, the proposal of the Citizens Concrete Company to cover gutter pavement with concrete top dressing and for concreting sidewalks was accepted, and a contract subsequently executed.

March 18th, the offer of Kenneth McKay to furnish granite paving blocks was accepted for five hundred square yards.

During the quarter the following streets have been repaired:

Brook street, from Tockwotton to India.
Clifford street, from Eddy to Dorrance.
Dorrance street, from Pine to Dyer.
Eddy street, from Ship to Pine.
Jackson street, from Broadway to Westminster.
North Main street, from foot of Constitution Hill to Benefit street.
Olney street, from North Main to Camp.
Pike street, from Brook to Benefit.
Richmond street, from Broad to South.
Ship street, from Eddy to Clifford.
Tockwotton street, from South Main to Gano.

Statements have been prepared of the cost of curbstones set, ascertained by the commissioner and certified to the board of aldermen for approval, as follows, viz.:

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Bogman street, from Hilton to Plane	$1,321 25
Ridge street, from Tobey to Atwell's avenue	2,156 28
Tanner street, from Pearl to Dudley	1,027 41
Ruggles street, from Chalkstone avenue to Smith street	793 27
Arthur avenue, from Kenyon street to Asia	633 20
Gesler street, from St. James Church to Ridge street	548 36
Atlantic street, from Broad to Niagara	1,024 79
Adelaide avenue, from Niagara street to Melrose	1,584 97
Roanoke street, from present curb to Mount Pleasant aveuue	1,288 68
Congress avenue, from Broad street to Melrose	2,165 31
Villa avenue, from Taber to Arlington	435 00
Penn street, from Almy to Ridge	831 74
Dover street. from Carleton to Mount Pleasant avenue	511 31
Atlantic street, from Niagara to Hamilton	760 71
Adelaide avenue, from Melrose street to near Elmwood avenue	499 45
Howe street, from Fenner avenue 450 feet easterly	752 80
Lilac street, from Brattle to Salem	910 46
Jackson avenue, from Potter's to Beckwith street	3,534 96
Admiral street, from Douglas avenue to Mowry street	2,175 31
Frank street, from Beacon avenue to Prairie	304 96
Hidden street, from Prospect to Brown	349 76
Hill street, from Howard to Perry	265 48
Transit street, from Ives to Gano	857 90
Franklin avenue, from Chalkstone to Vale street	1,593 11
Thurber's avenue, from west end of curb to Broad street	1,527 13
South Angell street, from present end of curb to East River	313 43
Washburn street, from Common to Orms	747 11
Hannah street, from Amherst to Amsterdam	620 67
North Main street, from Olney to Randall	1,402 27
Robinson street, from Prairie avenue to Gay street	1,309 40
Gay street, from Willard avenue to Dudley street	898 52
Gladstone street, from Broad to Baxter	940 76
Total	$34,085 76

During the quarter the following work was completed:

Sidewalks Curbed and Gutters Paved.

Date of order.

Dec. 20, 1888. *Franklin avenue, from Chalkstone avenue to Vale street.*

March 20, 1889. *Hannah street, from Amherst to Amsterdam.*

To be Macadamized.

Oct. 2, 1890. *Academy avenue, from Atwell's to Chalkstone.*

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To be Brought to Grade.

Date of order.

July 2, 1890, *Gaspee street, from Smith street southerly to angle in said street.*

Sidewalk to be Repaired.

No. of resolution. Date of approval.

606. Oct. 17, 1890, *Putnam street, corner Atwell's avenue.*

To be Removed.

657. Oct. 30, 1890, *Curbing on Messer street, west side, at entrance to Willow.*

Dec. 4, " *Curbing on Valley street, opposite Felix street.*

To Build Driveway.

53. Feb. 2, 1891. *Richmond street, entrance to fire station.*

The following work was in progress March 31, 1891, viz.:

Sidewalks to be Curbed and Gutters Paved.

Date of order.

Oct. 20, 1887, *West Exchange street, from Cove to Atwell's avenue:*—nearly completed.

Oct. 18, 1888, *Jackson avenue, from Potter's avenue to Beckwith street:*—curbing set, gutters paved and roadway nearly graveled.

April 17, 1890, *Hidden street, from Prospect to Brown:*—finished except rolling and concreting gutters.

" " " *Hyat street, from Amherst to Kossuth:*—work commenced.

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To Take Possession of.

Date of order.

Oct. 31, 1889, *King street, from Manton avenue to Sheridan street:*—work being done.

To be Rebuilt.

No. of resolution. Date of approval.

547. Sept. 20, 1890, *Douglas avenue, from Orms street to Vale:*—work more than one-half done.

To be Brought to Grade.

Date of order.

July 2, 1890, *Slater avenue from Irving to President:*—grading not completed between Lloyd and President avenues.

Sept. 18, 1890, *River avenue, from Douglas to Admiral street:*—nearly completed.

Oct. 16, 1890, *King street, from Manton avenue to Sheridan street:*—in process.

Nov. 20, " *Young Orchard avenue, from Governor street to Ives:*—in process.

To be Built.

No. of resolution. Date of approval.

432. Sept. 10, 1887, *West Exchange street, from Atwell's avenue to Cove street; also sewer in said street:*—work nearly completed.

Date of order.

July 28, 1890, *Melrose street, from Potter's avenue to Adelaide:*—finished except concreting gutters.

No. of resolution. Date of approval.

655. Oct. 28, 1890, *Kinsley avenue, from Gaspee street to Hemlock:*—in process.

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Curbstones to be Reset.

Date of order.	
Mar. 8, 1890,	*John street, from Benefit to Governor:*— completed from Benefit to Thayer.

The following work, ordered by the board of aldermen and city council, had not commenced March 31, 1891, namely:

Sidewalks to be Curbed and Gutters Paved.

Date of order.			
June	20,	1889,	*Butler avenue, from Blackstone park to President avenue.*
Oct.	17,	"	*Pettis street, from North Main to Moshassuck river.*
Dec.	19,	"	*Joslin street, from Atwell's avenue to Manton.*
Mar.	20,	"	*Plain street, from Potter's avenue to Pavilion.*
April	17,	1890,	*Beaufort street, from Academy avenue to Mount Pleasant.*
"	"	"	*La Vaughn street, from Atwell's avenue to Amherst street.*
"	"	"	*Pemberton street, from Kendrick to Dover.*
"	"	"	*Young avenue, from Smith street to Chalkstone avenue.*
May	15,	"	*Chalkstone avenue, from Smith street to Ruggles.*
"	"	"	*Glenham street, from Broad to Prairie avenue.*
"	"	"	*Swan street, from Ocean to Plain.*
"	"	"	*Taylor street, from Public to Glenham.*
June	19,	"	*Dudley street, from Prairie avenue to Plain street.*

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Date of order.			
June	19,	1890,	*McKenna street, from Cross to Whelden.*
Sept.	18,	"	*Broad street, east side, from near Chester avenue to Public street.*
"	"	"	*Gallup street, from Prairie avenue to Ocean street.*
"	"	"	*Gaspee street, from Smith street, southerly to second angle in said street.*
"	"	"	*Redwing street, from Greenwich to Bucklin.*
Oct.	16,	"	*Chalkstone avenue, from River avenue to Ruggles street.*
"	"	"	*Jessamine street, from Cranston to Salem.*
"	"	"	*Oxford street, from Harriet to Broad.*
"	"	"	*Sullivan street, from Greenwich to Hamilton.*
Nov.	20,	"	*Atwell's avenue, from Hannah street to Manton avenue.*
"	"	"	*Bucklin street, from Carter to Earl.*
"	"	"	*Chalkstone avenue, from Manton bridge to Fruit Hill avenue.*
"	"	"	*Chalkstone avenue, from Mount Pleasant to Academy.*
"	"	"	*Chester avenue, from Prairie to Milk street.*
"	"	"	*River avenue, from Chalkstone to Valley street.*
"	"	"	*Salisbury street, from Plain to Ocean.*
"	"	"	*Zone street, from Chalkstone avenue to Orms street.*
Dec.	18,	"	*Douglas avenue, from Admiral street to Branch avenue.*
"	"	"	*Ford street, from end of curb to Dexter.*
"	"	"	*Peace street, from Broad to Greenwich.*
"	"	"	*Plenty street, from Broad to Greenwich.*

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Date of order.	
Dec. 18, 1890,	*Taylor street, from Comstock avenue to Chester avenue.*
" " "	*Madison street, from land of N. Y. P. & B. R. R. Co. on the east side, and on the west side to within 190 feet of the land of said company.*
Jan. 15, 1891,	*Ashburton street, from Charles to Tremont.*
" " "	*Western street, from Pleasant to Jenkins.*

Gutters to be Ploughed Out and Roadway Graveled.

Date of order.	
Nov. 22, 1888,	*Dudley street, from Prairie avenue to Plain street.*

To be Paved with Granite Blocks.

No. of resolution.	Date of approval.	
269.	May 21, 1889,	*Greenwich street, from near Sprague to Public.*
584.	Sept. 20, 1890,	*Atwell's avenue, from Academy to Harris.*
735.	Dec, 22, "	*Friendship street, from Beacon avenue to Summer street.*
791.	Jan. 3, 1891,	*Eddy street, from Public to Thurber's avenue.*

Roadway to be Macadamized.

No. of resolution.	Date of approval.	
260.	May 7, 1890,	*Public street, from Eddy to Prairie avenue.*
568.	Sept. 20, "	*Roanoke street, from Pemberton to Academy avenue.*

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To be Brought to Grade.

Date of order.			
Oct.	28,	1884,	*Bucklin street, from Carter to Earl.*
April	13,	1889,	*Eddy street, from Railroad bridge to Broad street.*
Nov.	20,	1890,	*Chalkstone avenue, from Mount Pleasant to Winthrop.*
Dec.	4,	"	*Knowles street, from Cypress to Pleasant.*
Jan.	15,	1891,	*Summit avenue, from Fourth street to Seventh.*
March	5,	"	*Williams street, from Ives to Gano.*
"	19,	"	*Staniford street, from Public to Willard avenue.*

To Take Possession of and Remove Obstructions.

Date of order.			
July	21,	1890,	*Academy avenue, from Chalkstone avenue northerly.*
Oct.	16,	"	*Peace street, from Broad to Greenwich.*
"	"	"	*Plenty street, from Broad to Greenwich.*
"	"	"	*Pettis street, from North Main to Shove.*

To be Built.

No. of resolution.	Date of approval.		
785.	Jan. 5,	1891,	*Kinsley avenue, from Hemlock street to Eagle.*

To be Rebuilt.

530.	Sept. 8,	1890,	*Sherburne street, from Ocean to Eddy.*
569.	" 20,	1890,	*Dexter street, from High to Cranston.*
570.	" "	"	*Messer street, from High to Cranston.*
571.	" "	"	*Sycamore street, from High to Chapin avenue.*

Disposal of Surface Water.

749.	Dec. 29,	1890,	*Branch avenue, for Allen's Print Works.*

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To be Repaired.

No. of resolution. Date of approval.

585. Sept. 20, 1890, *Eddy street, from Westminster to Broad.*

Sidewalks to be Concreted.

705. Dec. 4, 1890, *Mill street, from North Main street, east side about 150 feet.*

737. " 22, " *South Main street, from Crawford to Transit.*

Impediments to be Removed and Surface Water Taken Care of.

Date of order.

Dec. 18, 1890, *Chapin avenue, near west side of Messer street.*

Bills approved on account of highways from January 1 to March 31, 1891, inclusive, amounted to:

Regular appropriation	$38,372 27	
Special appropriation	10,905 60	
		$49,277 87

Classified as follows:

Screening gravel	$8,817 30
Cleaning streets	5,538 46
Crushed stone—material and labor	5,344 92
Removing snow and ice	2,733 93
Stone—paving and crosswalk	2,725 37
Barn expenses	2,024 99
Salaries—superintendent and clerks	1,793 43
Labor on materials	1,462 88
Repairs on unpaved streets	1,392 74
Repairs on paved streets	1,326 27
Blacksmith and wheelwright shop	1,158 94
Steam rollers—repairs and supplies	699 51
Repairs on stone crushers	675 98
Tools, implements, etc	633 15
Horses, wagons, harnesses, etc	531 20
Amount carried forward	$36,859 07

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Amonnt brought forward	$36,859 07	
Watchman at city yard	340 20	
Fencing streets	88 16	
Sundries	84 44	
Telephone lines	31 48	
Office expenses, city yard	28 74	
		$37,432 09

NEW WORK—BUILDING AND RE-BUILDING STREETS, ETC., SIDEWALKS CURBED AND GUTTERS PAVED.

Franklin avenue, from Chalkstone avenue to Vale street	$413 01	
Hannah street, from Amherst to Amsterdam street	59 88	
Hyat street, from Amherst to Kossuth street	28 18	
Jackson avenue, from Potter's avenue to Beckwith street	40 58	
		541 65

PAVE WITH GRANITE BLOCKS.

Eddy street, from Public street to Thurber's avenue	$2,659 68	
Friendship street, from Beacon avenue to Summer street	2,881 52	
		5,541 20

TO BE BUILT.

Kinsley avenue, from Gaspee to Hemlock street	3,510 93

TO REBUILD.

Douglas avenue, from Orms to Vale street	1,340 00

BUILD DRIVEWAY.

Richmond street, entrance to fire station	217 05

TO BE BROUGHT TO GRADE.

River avenue, from Douglas avenue to Admiral street	557 11

SIDEWALKS REPAIRED.

Putnam street and Atwell's avenue, corner of	50 92

CURBING REMOVED AND RESET.

Willow street, entrance to, west of Messer street	86 92
	$49,277 87

Bills deposited with the city treasurer from January 1 to March 31, 1891, inclusive, amounted to $527 67

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As follows:

Labor and materials	$320 17
Street sweepings	204 50
Removing trees	3 00
	$527 67

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $1,137 39

As follows:

Labor and materials	$917 89
Street sweepings	152 00
Manure from barn	52 50
Tools	15 00
	$1,137 39

SIDEWALKS AND CURBING.

The expenditures on account of sidewalks and curbing, from January 1 to March 31, 1891, inclusive, amounted to $2,766 26

As follows:

Granite curbing	$2,766 26

Curbing bills deposited with the city treasurer for collection from January 1 to March 31, 1891, inclusive, amounted to $39,461 50

During the quarter, coupons from curbing bills collected have been returned by the city treasurer, and receipted for, amounting to . $13,353 76

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CITY ENGINEER.

Bills approved on account of city engineer's department, from January 1 to March 31, 1891, inclusive, amounted to $12,975 25

Charged as follows:

Salary—city engineer	$1,250 00
Salaries of assistants	10,240 54
Salaries of clerks	737 49
Supplies, drawing materials, etc	334 84
Horse-car tickets, etc	220 00
City engineer, for horse-hire	150 00
Sundries	29 25
Instruments and repairs	13 13
	$12,975 25

BRIDGES.

Bills approved on account of bridges from January 1 to March 31, 1891, inclusive, amounted to $4,424 22

Charged as follows:

Barn expenses	$40 13
Branch avenue bridge	9 29
Branch avenue culvert	3 61
Building at city yard	10 35
Cemetery street bridge	3 62
Central or Red bridge	17 20
Charles street bridge	2 12
Crawford street bridge	201 89
Eagle street bridge	14 50
Exchange bridge	35 11
Geneva bridge	1 00
Hawkins street bridge	5 07
Horses, wagons, harnesses, etc	10 74
Lumber, hardware, etc	347 33
Mill street bridge	9 27
Park street bridge	1 00
Point street bridge	1,153 49
Amount carried forward	$1,865 73

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Amount brought forward	$1,865 73
Rent of keeper's house, Washington bridge	30 00
Salaries, Point street bridge	985 50
Salaries, Washington bridge	495 69
Salaries, Red or Central bridge	450 00
Smithfield avenue bridge	38 61
Sundries	69 45
Tools	256 24
Wauskuck bridge	10 44
Washington bridge, near India Point	188 20
Washington bridge, over Providence river	33 88
Whipple street bridge	49
	$4,424 22

ROBERT E. SMITH,

Commissioner

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Amount brought forward	$1,865 73
Rent of keeper's house, Washington bridge	30 00
Salaries—Point street bridge	985 50
Salaries—Washington bridge	495 69
Salaries—Red or Central bridge	450 00
Smithfield avenue bridge	38 61
Sundries	69 45
Tools	256 24
Wanskuck bridge	10 44
Washington bridge, near India Point	188 20
Washington bridge, over Providence river	33 88
Whelden street bridge	49
	$4,424 22

ROBERT E. SMITH,

Commissioner.

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THIRTY-FOURTH QUARTERLY REPORT

OF THE

DEPARTMENT OF PUBLIC WORKS

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING JUNE 30, 1891.

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REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., July 1, 1891.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the thirty-fourth quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and the cost of same for the quarter ending June 30, 1891.

WATER WORKS.

April 7th, an agreement with Robert B. Little was executed on the part of the city by the mayor, for the lease of the wharf property foot of Point street, for the term of three years, from April 1, 1891, at an annual rental of three thousand dollars, payable quarterly.

April 17th, the offer of Thomas Phillips & Co., to furnish twenty thousand pounds pig lead delivered, was accepted. Amount, $950.00.

May 20th, the offer of Horatio O. Cotton to furnish labor and material for repairing and shingling the roofs of three cottages at Pettaconset was accepted. Amount, $447.00.

May 25th, the offer of John R. White & Son to furnish and deliver at Hope Pumping Station, one hundred and fifty tons egg coal and two hundred tons stove coal, was accepted. Amount, $1,667.50.

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May 29th, the offer of Kenneth McKay to relay the slope wall of Fruit Hill reservoir was accepted and a contract was subsequently executed. Amount, about $6,400.00.

June 3d, the offer of R. B. Little & Co., to deliver at Pettaconset from eighteen hundred to two thousand tons of coal was accepted. Amount, about $8,200.00.

Fifteen post hydrants were ordered from Chapman Valve Manufacturing Company, to be delivered in this city. Amount, $915.00.

June 22d, the offer of E. R. Crowell & Co., to paint four houses at Pettaconset, and two gate houses and iron work of steps at Sockanosset reservoir was accepted. Amount, $195.00.

June 23d, the offer of Congdon, Carpenter & Co., to furnish and deliver twenty thousand pounds pig lead was accepted. Amount, $990.00.

The average daily consumption of water during the last quarter was 7,326,821 gallons.

Water pipes were laid during the quarter, as follows:

16-INCH.

In Smith street and River avenue	178.22 feet.

12-INCH.

In Gaspee street, Chalkstone, Mount Pleasant and River avenues	3,657.39 feet.

10-INCH.

In Gaspee street	835.46 feet.

8-INCH.

In Burrington and Eddy streets, Chalkstone avenue, in Cranston street, Town of Cranston, and in Hartford and Old Killingly roads, Town of Johnston	7,195.78 feet.

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6-INCH.

In Amity, Ayrault, Burnett, California, Crout, Dudley, Earl, Eaton, Eddy, Felix, Ford, Gallup, Gay, Glenham, Gray, Joslin, Manchester, Morton, Ontario, Orchard, Oxford, Pemberton, Rosedale, Rowan, Seabury, Smith, Swan, Taylor and Waldo streets, Academy, Chalkstone, Gordon, Mount Pleasant, Narragansett, Pomona, Rounds, Standish, Winthrop and Young avenues, in Cranston street, Town of Cranston, and in Concord and Vermont streets, Laurel Hill and Union avenues, and Rocky Hill road, Town of Johnston	21,391.25 feet.
Total	33,258.10 feet

or 6.30—miles.

Water pipes were removed during the quarter, as follows:

16-INCH.

In River avenue	2.00 feet.

12-INCH.

In Smith street and Chalkstone avenue	220.65 feet.

10-INCH.

In Old Gaspee street	654.96 feet.

8-INCH.

In Eddy street and Chalkstone avenue	52.54 feet.

6-INCH.

In Crout street, Chalkstone, Mount Pleasant and River avenues	501.79 feet.
Total	1,431.94 feet.

or .27+ miles.

Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.00 feet.
30-inch	59,637.00 feet.
24-inch	43,418.92 feet.
20-inch	9,626.59 feet.
16-inch	31,922.58 feet.
12-inch	73,403.50 feet.
10-inch	14,652.26 feet.
8-inch	180,301.87 feet.
6-inch	808,676.07 feet.
Total	1,231,722.79 feet.

or 233.28+miles.

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Twenty-two fire hydrants were set during the quarter, one in each of the following locations:

Allston street, north side, about 200 feet west of Robin street.
Branch avenue, south side, at the easterly corner of Silver Spring street.
Branch avenue, south side, at the westerly corner of Charles street.
Chalkstone avenue, north side, at the easterly corner of Standish avenue.
Dudley street, north side, at the easterly corner of Gay street.
Dudley street, north side, 420 feet west of Gay street.
Eddy street, east side, opposite the north line of Calla street.
Glenham street, north side, at the easterly corner of Mount Vernon street.
Glenham street, north side, about 300 feet east of Broad street.
Hall street, east side, opposite the north line of Marietta street.
Hendrick street, north side, at the easterly corner of Pemberton street.
Langdon street, east side, at the southerly corner of Sherman street.
Old Killingly road, Johnston, north side, at the easterly corner of West Providence street.
Old Killingly road, Johnston, north side, at the easterly corner of Springfield street.
Old Killingly road, Johnston, north side, at the easterly corner of Burchard street.
Old Killingly road, Johnston, north side, about 170 feet east of Thornton street.
Pemberton street, east side, about 120 feet north of Amity street.
Plainfield street, Johnston, east side, at the southerly corner of Miller avenue.
Plainfield street, Johnston, east side, at the junction of Andrews avenue.
Pomona avenue, north side, at the easterly corner of Pemberton street.
Winthrop avenue, east side, 270 feet north of Chalkstone avenue.
Woodward road, east side, at the northerly corner of Ohio street.

The total number of fire hydrants is now thirteen hundred and eighty-eight; thirteen hundred and seventy-six flush and twelve post hydrants.

The work of laying the following list of water pipes was in process at the close of the quarter:

No. of resolution.	Date of approval.	
365.	July 18, 1888,	*Mount Pleasant avenue, extension from Chalkstone avenue to Smith street. 1,213.5 feet of 12-inch pipe laid; the balance cannot be properly laid until the street is graded.*

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No. of resolution.	Date of approval.	
775.	Jan. 3, 1891,	*High street, Hartford road and Rocky Hill avenue, Johnston:—1,681.39 feet of 8-inch pipe laid in Hartford road.*

Work had not commenced upon laying water pipes in the following streets, June 30, 1891:

No. of resolution.	Date of approval.	
241.	May 2, 1891,	*Larch street, from Ivy street easterly.*
299.	" 21, "	*Burrington street, from David to Frankfort.*
300.	" " "	*George street, from end of pip to a point 75 feet east of Brook street.*
339.	June 6, "	*Tuxedo avenue, from present end of pipe southerly.*
340.	" " "	*Grandview street, from present end of pipe easterly to Knowles street.*
341.	" " "	*Lisbon street, from end of pipe northwesterly.*
342.	" " "	*Narragansett avenue and Beckwith street, Cranston.*
343.	" " "	*Superior street, from Cranston to Wendell.*
372.	" 20, "	*Chatham street, from end of pipe northerly to 67 feet north of Ashton street.*
373.	" " "	*Wild and Henrietta streets, from Branch avenue to 125 feet east of Delahunt street.*

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No. of resolution.	Date of approval.	
385.	June 23, 1891,	*Dexter Asylum grounds.*
405.	" 24, "	*Atlantic street, from Melrose street easterly.*
406.	" " "	*Van Zandt street, from Jackson avenue westerly.*

During the quarter one hundred and seventy-four water meters were set, of which number ten were to replace other meters. The use of six meters was discontinued.

The following meters were in use at the close of the quarter:

Kind.	Size.							Total.
	⅝-in.	¾-in.	1-in.	1¼in.	2-in.	3-in.	4-in.	
Ball & Fitts, piston	3,027	592	145	40	5	.....	.....	3,809
Ball & Fitts, rotary	.....	.....	22	24	3	5	3	57
Crown	4,596	645	169	75	20	6	4	5,515
Fales, Jenks & Sons	1	1	1	.....	.....	.....	.....	3
Thomson	172	15	2	4	2	.....	.....	195
Worthington	15	1	.....	.....	1	.....	1	18
	7,811	1,254	339	143	31	11	8	9,597

Nine plumbers' licenses were issued during the quarter, making the total number seventy-two, all of which expire December 31, 1891.

Nine hundred and eighty-five permits to do plumbing work were issued during the quarter.

Three hundred and eight applications for water were made during the quarter, making the total number June 30, 1891, sixteen thousand eight hundred and seventy.

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The number of new service stops opened during the quarter was two hundred and seventy.

The total number of service stops opened to June 30, 1891, inclusive, was sixteen thousand one hundred and seventy-nine. The number in actual use June 30, 1891, was fifteen thousand two hundred and thirty-four.

The amount of bills approved on account of water works from April 1 to June 30, 1891, inclusive, was

For construction and extension, . . $50,427 02

Classified as follows:

Cast iron water pipe	$18,154 48
Fruit Hill reservoir, for repairs	17,415 93
Laying water pipes	9,327 30
Taps and stops	1,327 42
Special castings	1,267 97
Laying service pipes	915 52
Labor on and carting pipe	765 34
Fruit Hill reservoir, for construction	721 52
Barn expenses	188 91
Wharf salaries	176 75
Tools	121 70
Horses, wagons, harnesses, etc	44 18
	$50,427 02

For maintenance, ... $21,252 58

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$1,450 11
Firemen	805 61
Sundries	678 00
Engineers	631 30
Real estate	496 78
Superintendence	252 09
Lights	204 50
Oil, waste and packing	170 68
Care of grounds	163 09
Amount carried forward	$4,852 16

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Amount brought forward	$4,852 16	
Labor on fuel	161 68	
Barn expenses	65 50	
Corliss pumping engine and house	62 32	
Cornish pumping engine	19 75	
Worthington pumping engine	4 83	
		$5,166 24

Sockanosset Reservoir.

Watchman	$138 00	
Sundries	40 42	
		178 42

Hope Pumping Station.

Coal and wood	$1,667 50	
Sundries	812 96	
Engineers	580 45	
Firemen	423 48	
Care of grounds	417 76	
Lights	110 00	
Hope pumping engine, No. 1	58 08	
Oil, waste and packing	6 24	
Hope pumping engine, No. 2	2 60	
		4,079 07

Hope Reservoir.

Sundries	$2,310 79	
Watchman	219 40	
		2,530 19

Pipe Line and Service Stops.

Repairs	$1,344 19	
Superintendence—salaries	656 35	
		2,000 54

Meter Department.

Water meters	$2,596 27	
Setting and repairing meters	1,047 72	
		3,643 99

Miscellaneous.

Clerks' and inspectors' salaries	$2,854 66	
Prevention of defilement of the Pawtuxet	254 91	
Barn expenses	213 27	
Analyses of water	97 20	
Telephone lines	63 54	
Sundries	61 19	
Amounts carried forward	$3,544 77	$17,598 45

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Amounts brought forward	$3,544 77	$17,598 45
Horses, wagons, harnesses, etc.	58 66	
Public drinking fountains and troughs	26 65	
Real estate at Pawtuxet	17 50	
Pipe yard, office expenses	6 55	
		3,654 13
		$21,252 58

The amount of expenditures from April 1 to June 30, 1891, inclusive, was . . . $71,679 60

The total expenditures to June 30, 1891, inclusive, were $7,269,796 48

The *net* expenditure for construction and extension from April 1 to June 30, 1891, inclusive, was	$49,842 45
The *net* expenditure for construction and extension to June 30, 1891, inclusive, was	5,649,779 59
The *net* expenditure for maintenance from April 1 to June 30, 1891, inclusive was	16,519 00
The *net* expenditure for maintenance to June 30, 1891, inclusive, was	1,009,798 18

Bills deposited with the city treasurer for collection from April 1 to June 30, 1891, inclusive, amounted to $44,076 99

As follows:

Water	$38,254 31
Water meters	3,544 80
Setting and repairing meters	1,139 10
Rent of real estate	390 61
Penalties	40 00
Permanently closing service stops	35 00
Labor and materials, laying service pipes, etc.	664 27
Cast-iron water pipes	5 00
Lead pipe	3 90
	$44,076 99

During the quarter coupons from bills collected have been returned by the city treasurer, and receipted for, amounting to . . . $41,349 27

As follows:

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Water	$35,991 12
Water meters	3,530 80
Setting and repairing meters	917 26
Rent of real estate	250 52
Penalties	40 00
Permanently closing service stops	35 00
Labor and materials, laying service pipes, etc	584 57
	$41,349 27

SEWERS.

During the quarter ending June 30, 1891, two hundred and thirty-two permits were issued to drain layers; one hundred and sixty-eight for new work, and sixty-four for extension and repair of drains.

Four drain-layer's licenses were issued during the quarter, making the total number twenty-eight, all of which expire December 31, 1891.

April 2d, the proposal of Manchester & Hudson to furnish flagstones for the improved sewerage system, delivered in this city, was accepted, and a contract was subsequently executed. Amount, $909.00.

April 2d, the proposal of John W. Mathewson & Son, of Greenville, R. I., to furnish catch-basin stones for the improved sewerage system, delivered in this city, was accepted, and a contract was subsequently executed. Amount, $3,475.00.

April 2d, the proposal of Charles M. Kelly, Jr., to furnish sewer pipes, etc., for the improved sewerage system, delivered in this city, was accepted, and a contract was subsequently executed. Amount, $6,995.46.

April 9th, a contract was executed with Manchester & Hudson to furnish eight hundred thousand sewer bricks, delivered in this city. Amount, $6,400.00.

April 13th, the offer of Frederick E. Shaw to build a storm sewer in Chalkstone avenue at the railroad bridge was accepted. Amount, $550.00.

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April 22d, the offer of Garvey Brothers to furnish cut granite for section two, improved sewerage system was accepted, and a contract was subsequently executed. Amount, $2,579.00.

April 27th, the proposal of Manchester & Hudson to furnish one million brick, delivered in this city, for the improved sewerage system, was accepted, and a contract was subsequently executed. Amount, $8,250.00.

May 23d, the proposal of Long Island Brick Company, of Greenport, Long Island, to furnish one million brick for the improved sewerage system, delivered in this city, was accepted, and a contract was subsequently executed. Amount, $7,000.00.

May 27th, the offer of Smithfield Granite Company to furnish and deliver on the work, cut granite for the outlet of the sewer in Blackstone Park for the improved sewerage system, was accepted. Amount, $230.00.

During the quarter assessments for the cost of constructing sewers were certified to the city treasurer, as follows, viz:

Broadway and Tobey street	$3,873 16
Tobey street	2,015 31
High street	1,743 12
Oak, Sycamore and High street	2,708 47
Parade street	2,155 33
Oak street	968 28
Grove street	1,532 00
Almy street	1,928 31
Randall street	1,895 47
Ring street	1,592 00
Harkness street	1,460 05
Congdon street	563 87
Almy and Gesler streets	2,900 41
Willow street	2,140 26
Penn street	1,354 46
Ring street	1,020 28
Acorn street	1,099 20
Total	$30,949 98

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By resolution No. 181, approved April 14, 1891, commissioner was authorized to relieve Everson & Lid from liability under their contracts dated June 28, 1890, building sewers in sections six, seven and nine, of the proved sewerage system.

May 7th, contracts for the construction of sewers the improved sewerage system, which were subsequen executed, were awarded as follows, namely:

[The amounts given below are what are estimated will be paid the contractor labor, and do not include cost of inspection and materials (except cement), or rock vation.]

To Everson and Liddle.

Elmwood Division, Section 6, . .	$146,999

To Frederick E. Shaw.

Elmwood Division, Section 7, . . .	$79,322

To John J. Everson.

Elmwood Division, Section 9, . . .	$78,727

To James J. Newman.

Elmwood Division, Dexter street, . .	$46,315
Elmwood Division, Hamilton, Irving and Melrose streets, ...	$57,863

To Kenneth McKay and George R. Newman.

Seekonk River Division, Humboldt avenue, Wayland avenue, an Unimproved street, and Blackstone Park, ...	$26,660

May 11th, contracts for the construction of lateral sew which were subsequently executed, were awarded as follo namely:

[The amounts given below are what are estimated will be paid the contractor labor, and do not include cost of inspection and materials, or rock excavation.]

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To Frederick E. Shaw.

No. of resolution.	Date of approval.		
703.	Dec. 1, 1890,	*Smith street, from State to Charles and to the river.* . .	$2,839 50
139.	March 21, 1891,	*Brownell street, from summit near Park to Holden,* . . .	534 00
141.	" " "	*Smith, Davis, and Jefferson streets,* .	5,184 15
199.	April 14, "	*Dale street, from Atwell's avenue to West Exchange street,* .	391 50
200.	" " "	*Lily, Spruce, and McAvoy streets,* .	1,554 85

To John Keogh.

No. of resolution.	Date of approval.		
715.	Dec. 6, 1890,	*Eddy street, from Tallman to Ship,* .	311 80
740.	" 22, "	*Manton avenue, from Amherst street, to Joslin,* . . .	1,885 40
79.	Feb. 5, 1891,	*Prospect street, from Halsey to Hidden,* .	170 40
157.	April 1, "	*Florence street, from Amherst to Manton avenue,* . . .	1,246 90
159.	" " "	*Julian street, from Amherst to Manton avenue.*	1,846 40
160.	" " "	*Knowles street, from Pleasant to Cypress,*	870 60
194.	" 14, "	*Clemence street, from Westminster 95 feet northerly,* . . .	206 50
198.	" " "	*Baker avenue, High street, and Broadway,*	1,667 80

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To George R. Newman.

No. of resolution.	Date of approval.		
716.	Dec. 6, 1890,	*Vinton street, from Asia to Atwell's avenue,*	$1,329 20
751.	" 29, "	*Dodge and Cranston streets,* . . .	1,218 90
771.	Jan. 3, 1891,	*Knight street, from summit to Cranston street,* . . .	653 80
80.	Feb. 5, "	*Warren street, from Fuller to Dexter,* .	1,328 40
140.	March 21, "	*Irving avenue, from Arlington to Taber,* .	554 55
158.	April 1, "	*Ford street, from Cranston to Dexter,*	2,201 80

June 11th, contracts for constructing lateral sewers, which were subsequently executed, were awarded as follows, namely:

To Frederick E. Shaw.

No. of resolution.	Date of approval.		
212.	April 17, 1891,	*Harrison, Wilson, and Constitution streets,* .	$1,284 20
239.	May 2, "	*Plenty street, from summit to Broad street,* . . .	974 95
296.	" 21, "	*Greenwich, Oakland, and Public streets,* .	14,566 00
297.	" " "	*Hospital street, from South to Point,* .	454 40

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To JOHN KEOGH.

No. of resolution.	Date of approval.		
211.	April 17, 1891,	*East street, from end of sewer to Arnold street,* . . .	$175 70
238.	May 2, "	*Congdon street, from Jenckes to Halsey,* .	1,956 40
240.	" " "	*Woodland street, from Holden to Park,* .	677 00
295.	" 21, "	*Cranston street, from Wendell to Bridgham,*	3,149 85

During the quarter the construction of the following sewers was completed, namely:

No. of resolution.	Date of approval.		Date of completion.
395.	June 21, 1890,	*Harvard avenue, from Taylor street, westerly,*	April 29, 1891.
550.	Sept. 20, "	*Broad street, from Stewart to Summer,*	April 13, 1891.
552.	" " "	*Joslin street, from Atwell's avenue to Amherst street,*	April 7, 1891.
667.	Nov. 10, "	*Meader street, from Almy to Harkness,*	April 21, 1891.
703.	Dec. 1, "	*Smith street, from State to Charles, and also to the river,*	June 26, 1891.
715.	Dec. 6, "	*Eddy street from Tallman to Ship,*	May 3, 1891.
716.	" " "	*Vinton street, from Asia to Atwell's avenue,*	June 6, 1891.

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751.	Dec. 29, 1890,	*Dodge and Cranston streets, from summit in Dodge street to Codding,*	June 26, 1891.
771.	Jan. 3, 1891,	*Knight street, from summit to Cranston street,*	June 11, 1891.
194.	April 14, "	*Clemence street, from Westminster street 95 feet northerly,*	June 5, 1891.
294.	May 21, "	*Clemence street, from Westminster street to a point about 160 feet northerly,*	June 5, 1891.

At the close of the quarter, work upon the following sewers of the Improved Sewerage System was in progress, namely:

Disposal Division, Iron Pipe Outlet Sewer.
Disposal Division, Section 1.
Elmwood Division, Section 2.
Elmwood Division, Section 5.
Elmwood Division, Section 6.
Elmwood Division, Section 7.
Elmwood Division, Section 8.
Elmwood Division, Section 9.

No. of resolution.	Date of approval.	
55.	Feb. 2, 1891,	*Dexter street, from Cranston to Potter's avenue.*
57.	" " "	*Humboldt and Wayland avenues; thence through land deeded to the city to Butler avenue; thence through Blackstone Park to Seekonk River.*

Work upon the following lateral sewers was in progress at the close of the quarter, namely:

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No. of resolution.	Date of approval.	
740.	Dec. 22, 1890,	*Manton avenue from Amherst to Joslin street.*
141.	Mar. 21, 1891,	*Smith, Davis and Jefferson streets.*
157.	April 1, "	*Florence street, from Amherst to Manton avenue.*
158.	" " "	*Ford street, from Cranston to Dexter.*
239.	May 2, "	*Plenty street, from summit in Plenty to Broad.*

Work upon the following sewers, completing the work ordered by the city council, had not commenced June 30, 1891, viz.:

No. of resolution.	Date of approval.	
56.	Feb. 2, 1891,	*Hamilton, Irving and Melrose streets.*
79.	" 5, "	*Prospect street, from Halsey to Hidden.*
80.	" " "	*Warren street, from Fuller to Dexter.*
139.	Mar. 21, "	*Brownell street, from summit to Holden.*
140.	" " "	*Irving avenue, from Arlington to Taber.*
159.	April 1, "	*Julian street, from Amherst to Manton avenue.*
160.	" " "	*Knowles street, from Pleasant to Cypress.*
198.	" 14, "	*Baker avenue, High street and Broadway.*
199.	" " "	*Dale street, from Atwell's avenue to West Exchange street.*
200.	" " "	*Lily, Spruce and McAvoy streets.*

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No. of resolution.	Date of approval.	
211.	April 17, 1891,	*East street, from end of sewer to Arnold street.*
212.	" " "	*Harrison, Wilson and Constitution streets.*
238.	May 2, "	*Congdon street, from Jenckes to Halsey.*
240.	" " "	*Woodland street, from Holden to Park.*
295.	" 21, "	*Cranston street, from Wendell to Bridgham.*
296.	" " "	*Greenwich, Oakland and Public streets.*
297.	" " "	*Hospital street, from South to Point.*
371.	June 20, "	*Perkins street, from Pearl to A.*
403.	" 24, "	*Halsey street, from Congdon about 140 feet easterly.*
404.	" " "	*Wilson street, from Fuller to Gilmore.*

The amount of bills approved on account of sewers from April 1 to June 30, 1891, inclusive, was

FOR CONSTRUCTION.

Regular appropriation	$24,996 29	
Improved sewerage appropriation	154,817 10	
		$179,813 39

Charged as follows:

Materials	$41,587 48
Tools	8,465 94
Rent of wharf and pipe yard	750 00
Sundries, improved sewerage system	733 57
Testing cement	540 10
Additional catch basins	165 08
Amount carried forward	$52,242 17

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Amount brought forward	$52,242 17
Sewer in Broad street, from Stewart to Summer street	701 11
Sewer in Clemence street, from Westminster street northerly	384 87
Sewer in Dodge and Cranston streets, from summit in Dodge street to Codding street	1,333 65
Sewer in Eddy street, from Tallman to Ship street	294 88
Sewer in Florence street, from Amherst street to Manton avenue	393 45
Sewer in Ford street, from Cranston to Dexter street	321 15
Sewer in Harvard avenue, from Taylor street westerly	595 20
Sewer in Joslin street, from Atwell's avenue to Amherst street	54 58
Sewer in Knight street, from the summit in said street to Cranston street	628 42
Sewer in Manton avenue, from Amherst to Joslin street	2,444 52
Sewer in Meader street, from Almy to Harkness street	604 45
Sewer in Plenty street, from the summit in said street to Broad street	604 84
Sewer in Smith street, from State to Charles street, and also to the river	2,783 24
Sewer in Smith, Davis and Jefferson streets	789 19
Sewer in Vinton street, from Asia street to Atwell's avenue	1,350 93
Sewer in Dexter street, from Cranston street to Potter's avenue	2,020 52
Sewer in Disposal Division, Section 1	200 82
Sewer in Elmwood Division, Section 2	29,169 36
Sewer in Elmwood Division, Section 5	18,580 65
Sewer in Elmwood Division, Section 6	22,907 53
Sewer in Elmwood Division, Section 7	13,629 42
Sewer in Elmwood Division, Section 8	489 95
Sewer in Elmwood Division, Section 9	505 74
Sewer in Hamilton, Irving and Melrose streets	216 31
Sewer in Humboldt avenue, Wayland avenue and Blackstone Park	4,897 03
Iron pipe sewer in Disposal Division, Section 1	15,274 41
Contract reservations	6,395 00
	$179,813 39

For maintenance, ... $7,301 21

Charged as follows:

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Cleaning basins and sewers	$3,217 00	
Repairing basins and sewers	743 02	
Cleaning and repairing old drains	663 98	
Horses, wagons, harnesses, etc	626 09	
Tools	623 05	
Barn expenses	481 71	
Inspection of connections	449 44	
Salary—superintendent	353 50	
Sundries	66 58	
Cleaning private connections	49 95	
Filling cisterns, etc	26 89	
	$7,301 21	

The *net* expenditure for construction of sewers to June 30, 1891, inclusive, was $2,414,781 84

The *net* expenditure for maintenance of sewers to June 30, 1891, inclusive, was 328,818 41

Bills deposited with the city treasurer for collection, from April 1 to June 30, 1891, inclusive, amounted to $388 41

As follows:

Cleaning private connections	$81 75
Filling cisterns, etc	15 25
Sprinkling base ball grounds	3 00
Use of ship pump	1 00
Sewer material to New York, Providence and Boston Railroad Company	196 58
Laying pipe drains	90 83
	$388 41

During the quarter, coupons from bills collected have been returned by the city treasurer, and receipted for, amounting to . . . $203 13

As follows:

Cleaning private connections	$73 50
Filling cisterns, etc	28 30
Making connection with sewer	6 50
Sprinkling base ball grounds	3 00
Use of ship pump	1 00
Laying pipe drains	90 83
	$203 13

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HIGHWAYS.

Four permits to open streets were issued during the quar-
ır.

April 29th, the offer of John Keogh to build a storm
ɔwer in Atwell's avenue, from Harris avenue to the Woon-
squatucket river, to take care of the surface water, was ac-
epted. This work was required in connection with paving
ıis portion of Atwell's avenue with granite blocks.
ımount, $2,724.00.

May 19th, the offer of John E. Collins, of Westerly, R.
., to furnish five hundred square yards of granite paving
ɔlocks was accepted. Amount, $775.00.

June 19th, the offer of Moses B. Tower to furnish and
leliver about sixteen hundred square yards of granite paving
ɔlocks was accepted. Amount, about $2,480.00.

June 22d, the offer of John E. Collins, of Westerly, R.
I., to furnish one thousand square yards of granite paving
blocks was accepted. Amount, $1,550.00.

June 30th, the offer of the Smith Granite Company, of
Westerly, R. I., to furnish twenty-five hundred feet of
granite curbing was accepted. Amount, $1,750.00.

During the quarter the following streets have been re-
paired:

Atwell's avenue, from Aborn street to Valley, and Academy avenue to Hannah street.
Benefit street, from North Main to India.
Eagle street, from Valley to the bridge.
Gaspee street, from Cove to Smith.
Harold street, from Regent to Valley.
Hewes street, from Stevens to North Main.
Jackson street, from Broadway to Westminster.
North Main street, at Constitution Hill.
Orms street, from Charles to Valley.
Pearl street, from Cranston to Pine.
Pine street, from Eddy to Broad.
Richmond street, from Broad to Point.
Smith street, from Oakland avenue to city line.
Tockwotton street, from South Water to Gano.
Valley street, from Zone to Hemlock.
Veazie street, from O'Neil to Branch avenue.
Winter street, from Lester to Broad.

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Statements have been prepared of the cost of curbstones set, ascertained by the commissioner and certified to the board of aldermen for approval, as follows, viz.:

West Exchange street, from Cove street to Atwell's avenue...	$4,398 60

During the quarter statements of the cost of concreting sidewalks, with ten per centum added to cover cost of assessing and collecting, were certified to the assessors of taxes, viz:

South Main street, from Crawford to Transit.....	$33 04
Mill street, from North Main, east side, about 150 feet.....	31 48
Ives street, from Angell to Pitman.....	86 90
Governor street, from Angell to Power.....	68 44
Melrose street, from Adelaide avenue to Potter's avenue.....	54 88
Comstock avenue, from Taylor street to Broad.....	58 64
Roanoke street, from Academy avenue to Mount Pleasant.....	352 85
Academy avenue, from Chalkstone to Atwell's.....	22 48
Thayer street, from Power to Transit.....	88 70
Total.....	$797 41

During the quarter the following work was completed:

SIDEWALKS CURBED AND GUTTERS PAVED.

Date of order.	
Oct. 20, 1887,	*West Exchange street, from Cove to Atwell's avenue.*
Oct. 18, 1888,	*Jackson avenue, from Potter's avenue to Beckwith street.*
Dec. 19, 1889,	*Joslin street, from Atwell's avenue to Manton.*
Mar. 20, "	*Plain street, from Potter's avenue to Pavilion.*
April 17, 1890,	*Beaufort street, from Academy avenue to Mount Pleasant.*
" " "	*La Vaughn street, from Atwell's avenue to Amherst street.*
" " "	*Pemberton street, from Kendrick to Dover.*
" " "	*Young avenue, from Smith street to Chalkstone avenue.*

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Date of order.	
April 17, 1890,	*Hidden street, from Prospect to Brown.*
May 15, "	*Chalkstone avenue, from Smith street to Ruggles.*
" " "	*Glenham street, from Broad to Prairie avenue.*
" " "	*Swan street, from Ocean to Plain.*
" " "	*Taylor street, from Public to Glenham.*
June 19, "	*Dudley street, from Prairie avenue to Plain street.*
" " "	*McKenna street, from Cross to Whelden.*
Sept. 18, "	*Broad street, east side, from near Chester avenue to Public street.*
Nov. 20, "	*Chester avenue, from Prairie to Milk street.*
Dec. 18, "	*Taylor street, from Comstock avenue to Chester.*

To Take Possession of.

Date of order.	
July 21, 1890,	*Academy avenue, from Chalkstone avenue northerly.*

To be Rebuilt.

No. of resolution.	Date of approval.	
530.	Sept. 8, 1890,	*Sherburne street, from Ocean to Eddy.*
547.	" 20, "	*Douglas avenue, from Orms street to Vale.*
569.	" " "	*Dexter street, from High to Cranston.*
570.	" " "	*Messer street, from High to Cranston.*
571.	" " "	*Sycamore street, from High to Chapin avenue.*

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To be Brought to Grade.

Date of order.	
Oct. 28, 1884,	*Bucklin street, from Carter to Earl.*
April 13, 1889,	*Eddy street, from railroad bridge to Broad street.*
Sept. 18, 1890,	*River avenue, from Douglas to Admiral street.*
Nov. 20, "	*Young Orchard avenue, from Governor street to Ives.*
" " "	*Chalkstone avenue, from Mount Pleasant to Winthrop.*
March 19, 1891,	*Staniford street, from Public to Willard avenue.*
April 16, "	*Burnett street, from Bucklin to Dexter.*

To be Built.

No. of resolution.	Date of approval.	
432.	Sept. 10, 1887,	*West Exchange street, from Atwell's avenue to Cove street; also sewer in said street.*
474.	July 28, 1890,	*Melrose street, from Potter's avenue to Adelaide.*
234.	May 2, 1891,	*Eddy street, from railroad bridge to Broad street.*

Gutters to be Ploughed Out and Roadway Graveled.

Date of order.	
Nov. 22, 1888,	*Dudley street, from Prairie avenue to Plain street.*

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To be Paved with Granite Blocks.

No. of resolution.	Date of approval.	
584.	Sept. 20, 1890,	*Atwell's avenue, from Academy to Harris.*
791.	Jan. 3, 1891,	*Eddy street, from Public to Thurber's avenue.*

Roadway to be Macadamized.

260.	May 7, 1890,	*Public street, from Eddy to Prairie avenue.*
568.	Sept. 20, "	*Roanoke street, from Pemberton to Academy avenue.*

Disposal of Surface Water.

749.	Dec. 29, 1890,	*Branch avenue, for Allen's Print Works.*

Sidewalks to be Concreted.

705.	Dec. 4, 1890,	*Mill street, from North Main street, east side about 150 feet.*
737.	" 22, "	*South Main street, from Crawford to Transit.*
177.	April 6, 1891,	*Ives street, from Angell to Pitman.*
224.	" 28, "	*Academy avenue, from Chalkstone to Atwell's.*
224.	" " "	*Claverick street, westerly side, from Friendship to Pine.*
224.	" " "	*Governor street, from Angell to Power.*
224.	" " "	*Melrose street, from Adelaide avenue to Potter's.*

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No. of resolution.	Date of approval.	
224.	April 28, 1891,	*Comstock avenue, from Taylor street to Broad.*
224.	" " "	*Roanoke street, from Mount Pleasant avenue to Academy.*
254.	May 5, "	*Thayer street, from Power to Transit.*

IMPEDIMENTS TO BE REMOVED AND SURFACE WATER TAKEN CARE OF.

Date of order.	
Dec. 18, 1890,	*Chapin avenue, near west side of Messer street.*

The following order was rescinded by resolution No. 259 approved May 6, 1891:

TO BE PAVED WITH GRANITE BLOCKS.

No. of resolution.	Date of approval.	
269.	May 21, 1889,	*Greenwich street, from near Sprague to Public.*

The following work was in progress June 30, 1891, viz.:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.		
Oct.	17, 1889,	*Pettis street, from North Main to Moshassuck river:*—crosswalk to be laid.
April	17, 1890,	*Hyat street, from Amherst to Kossuth:*—work commenced.
Sept.	18, "	*Gallup street, from Prairie avenue to Ocean street:*—roadway to be rolled, crosswalks laid and gutters concreted.
"	" "	*Redwing street, from Greenwich to Bucklin:*—curbing set and gutters paved.

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Date of order.		
Oct.	16, 1890,	*Chalkstone avenue, from River to Ruggles street:*—in process.
"	"	" *Jessamine street, from Cranston to Salem:*—roadway to be rolled, crosswalks laid and gutters concreted.
"	"	" *Oxford street, from Harriet to Broad:*—curbing set and gutters paved.
Nov.	20,	" *Atwell's avenue, from Hannah street to Manton avenue:*—in process.
"	"	" *Bucklin street, from Carter to Earl:*—in process.
"	"	" *Chalkstone avenue, from Manton bridge to Fruit Hill avenue:*—in process.
"	"	" *Salisbury street, from Plain to Ocean:*—in process.

To be Paved with Granite Blocks.

No. of resolution.	Date of approval.	
735.	Dec. 22, 1890,	*Friendship street, from Beacon avenue to Summer street:*—nearly completed.

To be Brought to Grade.

Date of order.		
July	2, 1890,	*Slater avenue, from Irving to President:*—grading not completed between Lloyd and President avenues.
Oct.	16,	" *King street, from Manton avenue to Sheridan street:*—in process,
Dec.	4,	" *Knowles street, from Cypress to Pleasant:*—in process.

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Curbstones to be Reset.

No. of resolution.	Date of approval.	
108.	Mar. 8, 1890,	*John street, from Benefit to Governor:*—completed from Benefit to Thayer.

To Take Possession of.

Date of order.	
Oct. 31, 1889,	*King street, from Manton avenue to Sheridan street:*—work being done.

To be Built.

No. of resolution.	Date of approval.	
655.	Oct. 28, 1890,	*Kinsley avenue, from Gaspee street to Hemlock:*—in process.
785.	Jan. 3, 1891,	*Kinsley avenue, from Hemlock street to Eagle:*—in process.
234.	May 2, "	*Chapin avenue, from Messer street to Norfolk:*—in process.

Land to be Filled.

185.	April 14, 1891,	*Edward S. Cheney, Adelaide avenue:*—in process.
186.	" " "	*Estate of Joseph J. Cooke, Adelaide avenue:*—in process.
187.	" " "	*William R. Randall, Adelaide avenue:*—in process.
188.	" " "	*Heirs of Adnah Sackett, Adelaide avenue:*—in process.

To be Macadamized.

347.	June 16, 1891,	*Broadway, from Sabin street to Barton:*—in process.

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The following work, ordered by the board of aldermen and city council, had not commenced June 30, 1891, namely:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.		
June	20, 1889,	*Butler avenue, from Blackstone park to President avenue.*
Sept.	18, 1890,	*Gaspee street, from Smith southerly to second angle in said street.*
Oct.	16, "	*Sullivan street, from Greenwich to Hamilton.*
Nov.	20, "	*Chalkstone avenue, from Mount Pleasant to Academy.*
"	" "	*River avenue, from Chalkstone to Valley street.*
"	" "	*Zone street, from Chalkstone avenue to Orms street.*
Dec.	18, "	*Douglas avenue, from Admiral street to Branch avenue.*
"	" "	*Ford street, from end of curb to Dexter.*
"	" "	*Peace street, from Broad to Greenwich.*
"	" "	*Plenty street, from Broad to Greenwich.*
"	" "	*Madison street, from land of N. Y. P. & B. R. R. Co. on the east side, and on the west side to within 190 feet of the land of said company.*
Jan.	15, 1891,	*Ashburton street, from Charles to Tremont.*
"	" "	*Western street, from Pleasant to Jenkins.*
May	21, 1891,	*Hanover street, from Dexter westerly to the present end of curbing.*
"	" "	*Kinsley avenue, from Gaspee street to Eagle.*

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Date of order.			
May	21,	1891,	*Williams street, from Ives to Gano.*
June	18,	"	*Eighth street, from Highland avenue to Pawtucket.*
"	"	"	*Acorn street, from Kinsley avenue to Harris.*
"	"	"	*Chapin avenue, from Messer street to Norfolk.*
"	"	"	*John street, from Thayer to Brook.*

To be Brought to Grade.

Date of order.			
Jan.	15,	1891,	*Summit avenue from Fourth street to Seventh.*
March	5,	"	*Williams street, from Ives to Gano.*
April	2,	"	*Back, Charles and Smith streets.*
May	1,	"	*Eighth street, from Pawtucket avenue to Summit.*
June	23,	"	*Elmwood avenue, from Roger Williams to the bridge over tracks of the N. Y. P. & B. R. R. Co.*

To take Possession of and Remove Obstructions.

Date of order.			
Oct.	16,	1890,	*Peace street, from Broad to Greenwich.*
"	"	"	*Plenty street, from Broad to Greenwich.*
"	"	"	*Pettis street, from North Main to Shove.*
April	11,	1891,	*Greenwich street, from Bridgham to Lexington avenue.*
June	23,	"	*Young avenue, from Smith street to Chalkstone avenue.*

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To be Repaired.

No. of resolution.	Date of approval.	
585.	Sept. 20, 1890,	*Eddy street, from Westminster to Broad.*

To be Put in Safe Condition.

Date of order,		
April	2, 1891,	*Eighth street, from Summit avenue to Pawtucket.*
June	29, "	*Stampers street, from North Main to Hewes.*

To Build Driveway.

No. of resolution.	Date of approval.	
289.	May 21, 1891,	*South Main street, corner of Coin, entrance to fire station.*

To be Paved with Granite Blocks.

369.	June 20, 1891,	*Olney street, north side, from North Main street easterly to turn-out of the U. R. R. Co.*

To be Built.

410.	June 30, 1891,	*Greenwich street, from Bridgham to Lexington avenue.*

Bills approved on account of highways from April 1, to June 30, 1891, inclusive, amounted to:

Regular appropriation	$43,762 57	
Special appropriation	106,155 68	
		$149,918 25

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Classified as follows:

Cleaning streets	$14,584 76	
Repairs on unpaved streets	5,837 34	
Crushed stone—material and labor	2,392 79	
Tools, implements, etc	1,926 46	
Repairs on paved streets	1,831 30	
Barn expenses	1,624 36	
Steam rollers—repairs and supplies	1,547 96	
Horses, wagons, harnesses, etc	1,174 39	
Salaries—superintendent and clerks	1,109 80	
Screening gravel	883 25	
Blacksmith and wheelwright shop	602 50	
Repairs on stone crushers	314 00	
Stone—paving and crosswalk	240 60	
Sundries	219 52	
Contract reservation	121 00	
Watchman at city yard	113 40	
Fencing streets—material and labor	16 66	
Labor on materials	13 40	
Telephone lines	6 55	
Office expenses, city yard	96	
		$34,561 0[illegible]

NEW WORK—BUILDING AND RE-BUILDING STREETS, ETC., SIDEWALKS CURBED AND GUTTERS PAVED.

Atwell's avenue, from Hannah street to Manton avenue	$1,568 48	
Bucklin street, from Carter to Earl	647 32	
Broad street, east side, from end of curb south of Chester avenue to Public street	1,214 24	
Beaufort street, from Academy avenue to Mount Pleasant	4,811 18	
Chalkstone avenue, from Smith street to Ruggles	1,294 58	
Chester avenue, from Prairie to Milk street	567 78	
Chalkstone avenue, from River to Ruggles street	584 80	
Chalkstone avenue, from Manton bridge to Fruit Hill avenue	125 27	
Dudley street, from Prairie avenue to Plain street	3,269 66	
Franklin avenue, from Chalkstone to Vale street	122 36	
Gallup street, from Prairie avenue to Ocean street	1,934 21	
Glenham street, from Broad to Prairie avenue	3,712 50	
Hannah street, from Amherst to Amsterdam	275 53	
Hidden street, from Prospect to Brown	190 10	
Amounts carried forward	$20,318 01	$34,561

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mounts brought forward	$29,318 01	$34,561 00
treet, from Amherst to Kossuth	12 60	
n avenue, from Potter's to Beckwith street	2,574 13	
street, from Atwell's avenue to Manton	3,417 33	
ine street, from Cranston to Salem,	2,566 21	
es street, from Cypress to Pleasant	168 31	
ugh street, from Atwell's avenue to Amherst treet	1,550 34	
una street, from Cross to Whelden	368 82	
l street, from Harriet to Broad	1,994 33	
street, from North Main to Moshassuck iver	765 10	
rton street, from Kendrick to Dover	2,717 61	
street, from Potter's avenue to Pavilion	7,366 45	
street, from Broad to Greenwich	15 50	
ng street, from Greenwich to Bucklin	405 23	
n street, from Greenwich to Hamilton	81 75	
ury street, from Plain to Ocean	85 63	
street, from Ocean to Plain	1,051 29	
street, from Public to Glenham	377 62	
r street, from Comstock avenue to Chester	2,207 72	
avenue, from Smith street to Chalkstone venue	770 70	
treet, from Chalkstone avenue to Orms street	52 60	
		48,867 28

PAVE WITH GRANITE BLOCKS.

's avenue, from Academy to Harris	$11,404 30	
treet, from Public to Thurber's avenue	19,604 17	
lship street, from Beacon avenue to Summer eet	1,745 74	
		32,754 21

TO BE BUILT.

avenue, from Messer street to Norfolk	$1,995 98	
street, from railroad bridge to Broad	3,303 45	
y avenue, from Gaspee street to Hemlock	1,185 90	
y avenue, from Hemlock street to Eagle	6,747 77	
Exchange street, from Cove to Ridge	89 18	
		13,322 28

TO REBUILD.

street, from High to Cranston	$1,592 07	
as avenue, from Orms street to Vale	1,698 39	
Amounts carried forward	$3,290 46	$129,504 77

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Amounts brought forward	$3,290 46	$129,504 77
Messer street, from High to Cranston	577 63	
Sherburne street, from Ocean to Eddy	348 52	
Sycamore street, from High to Chapin avenue	1,087 74	
		5,304 35

MACADAMIZE.

Academy avenue, from Atwell's to Chalkstone	$283 01	
Broadway, from Sabin street to Barton	940 13	
Public street, from Eddy to Prairie avenue	2,222 52	
		3,445 66

TO BE BROUGHT TO GRADE.

Burnett street, from Bucklin to Dexter	$1,024 90	
Chalkstone avenue, from Mount Pleasant to Winthrop	819 35	
Eddy street, from railroad bridge to Broad	1,759 75	
River avenue, from Douglas to Admiral street	1,795 32	
Stanford street, from Public to Willard avenue	1,191 65	
Young Orchard avenue, from Governor street to Ives	668 61	
		7,259 58

TO TAKE POSSESSION OF AND REMOVE OBSTRUCTIONS.

Academy avenue, from Chalkstone to northerly termination	$798 16	
Chapin avenue, near west side of Messer street	737 45	
		1,535 61

SIDEWALKS REPAIRED.

Putnam street and Atwell's avenue, corner of		113 02

CURBING REMOVED AND RESET.

Roanoke street, from Pemberton to Academy avenue	$927 96	
Valley street, opposite Felix	64 35	
		992 31
Amount carried forward		$148,155 30

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Amount brought forward	$148,155 30
GUTTERS CONCRETED.	
Melrose street, from Potter's avenue to Adelaide	1,334 15
PUT IN SAFE CONDITION.	
Delahunt street	36 30
LANDS TO BE FILLED.	
Land of *Heirs of Adnah Sackett et al.*, on Adelaide avenue	392 50
	$149,918 25

Bills deposited with the city treasurer from April 1 to June 30, 1891, inclusive, amounted to $794 76

As follows:

Street sweepings	$362 28
Labor and materials	254 28
Use of steam roller	112 45
Manure from barn	56 25
Use of water cart	5 00
Removing trees	4 00
Chopping block	50
	$794 76

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $726 83

As follows:

Street sweepings	$362 28
Labor and materials	256 35
Manure from barn	56 25
Use of steam roller	42 45
Use of water cart	5 00
Removing trees	4 00
Chopping block	50
	$726 83

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SIDEWALKS AND CURBING.

The expenditures on account of sidewalks and curbing, from April 1 to June 30, 1891, inclusive, amounted to $23,090 97

As follows:

Granite curbing	$22,366 01
Concreting sidewalks	724 96
	$23,090 97

Curbing bills deposited with the city treasurer for collection from April 1 to June 30, 1891, inclusive, amounted to $4,621 64

During the quarter, coupons from curbing bills collected have been returned by the city treasurer, and receipted for, amounting to . $8,922 73

CITY ENGINEER.

Bills approved on account of city engineer's department, from April 1 to June 30, 1891, inclusive, amounted to $13,924 61

Charged as follows:

Salary—city engineer	$1,250 00
Salaries of assistants	10,783 70
Salaries of clerks	750 58
Instruments and repairs	491 47
Supplies, drawing materials, etc.	230 08
Horse-car tickets, etc.	220 00
City engineer, for horse-hire	150 00
Sundries	46 28
Meteorological instruments and repairs	2 50
	$13,924 61

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BRIDGES.

April 18th, the proposal of James A. Potter & Co. to furnish and deliver 278,140 feet B. M. yellow pine lumber was accepted, and a contract was subsequently executed. Amount, $5,980 01.

April 18th, the proposal of George A. Keach, of North Ashwood, Connecticut, to furnish and deliver 47,900 feet B. M. white oak lumber was accepted, and a contract was subsequently executed. Amount, $1,197 50.

April 23d, permission was granted the city by the Providence Dyeing, Bleaching, and Calendering Company to remove the bridge on Delaine street, next west of Valley street, and to fill in the street to grade to its full width.

May 20th, the offer of Fuller Iron Works to furnish stock and labor for tracks and bearing shoes for Central bridge was accepted. Amount, $375 00.

May 20th, the offer of Charles Pay & Co., to furnish and place three iron bands on pier cylinders of Washington bridge, near India Point, was accepted. Amount, $95 00.

May 25th, the proposal of John T. Tank to build the abutment and wing walls for the Hawkins street bridge, was accepted, and a contract was subsequently executed. Amount, $2,360 00.

Bills approved on account of bridges from April 1 to June 30, 1891, inclusive, amounted to $4,874 45

Charged as follows:

Atwell's avenue bridge	$2 88
Barn expenses	39 42
Central or Red bridge	414 51
Cemetery street bridge	6 48
Amount carried forward	$463 29

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Amount brought forward	$463 29
Crawford street bridge	244 14
Delaine street bridge	57 28
Eagle street bridge	8 15
Horses, wagons, harnesses, etc	10 33
Nash lane bridge	25 76
Park street bridge	14 21
Point street bridge	485 87
Railroad Crossing street bridge	2 05
Rent of keeper's house, Washington bridge	30 00
Salaries—Point street bridge	998 00
Salaries—Washington bridge	494 44
Salaries—Central or Red bridge	463 50
Sundries	49 07
Tools	35 84
Washington bridge, near India Point	1,429 97
Washington bridge, over Providence river	1 15
Wanskuck bridge	4 30
West River street bridge	57 10
	$4,874 45

Bills deposited with the city treasurer from April 1 to June 30, 1891, inclusive, amounted to $11 25

As follows:

Old lumber	$11 25

During the quarter coupons from bills collected have been returned by the city treasurer, and receipted for, amounting to $11 25

As follows:

Old lumber	$11 25

ROBERT E. SMITH,

Commissioner.

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CITY DOCUMENT. [No. 30.

THIRTY-FIFTH
UARTERLY REPORT

OF THE

RTMENT OF PUBLIC WORKS

OF THE

CITY OF PROVIDENCE, R. I.

ARTER ENDING SEPTEMBER 30, 1891.

The Providence Press:
Snow & Farnham, City Printers,
37 Custom House Street.
1891.

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THIRTY-FIFTH QUARTERLY REPORT

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TILDEN FOUNDATIONS.

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REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., October 1, 1891.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the thirty-fifth quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and the cost of same for the quarter ending September 30, 1891.

WATER WORKS.

July 10th, the offer of Fales & Jenks Machine Co. to furnish and deliver ten fire hydrants, boxes and covers was accepted. Amount, $1,400.

July 31st, the offer of R. D. Wood & Co. to furnish and deliver four hundred tons cast iron water pipes, was accepted. Amount, $10,960.

August 1st, the offer of Whittier Machine Co. to furnish and deliver on board cars in this city twenty-five six-inch, twenty-five eight-inch, and two twelve-inch water gates, was accepted. Amount, $1,248.75.

August 3d, the offer of Thomas Phillips & Co. to furnish and deliver five thousand pounds lead pipe was accepted.

August 3d, the offer of L. H. Tillinghast & Co. to furnish and deliver five thousand pounds lead pipe was accepted.

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August 22d, the offer of Providence Architectural Iron and Metal Works to repair the top of the chimney of Cornish Engine House, Pettaconset, was accepted.

September 2d, the offer of Congdon, Carpenter & Co. to furnish and deliver ten tons pig lead was accepted.

September 7th, the offer of Kenneth McKay to furnish and lay slope paving for Fruit Hill Reservoir was accepted.

September 10th, the offer of Chapman Valve Manufacturing Co. to furnish and deliver six 6-inch post hydrants was accepted. Amount, $366.

September 23d, the offer of Thomas Phillips & Co. to furnish and deliver five tons lead pipe was accepted.

September 23d, the offer of L. H. Tillinghast & Co. to furnish and deliver five tons lead pipe was accepted.

The average daily consumption of water during the last quarter was 7,693,963 gallons.

Water pipes were laid during the quarter, as follows:

30-INCH.

In Olneyville Square, Town of Johnston..... 256.04 feet.

12-INCH.

In Fenner and Thurber's avenues..... 1,667.79 feet.

8-INCH.

In Burrington, Byfield, Canton, Carleton and George streets, Douglas and River avenues, in Union avenue, Town of Cranston, and in Plainfield street, Dyer, Thornton and Union avenues, Town of Johnston..... 8,847.02 feet.

6-INCH.

In Akerman, Allston, Bergen, Binney, Cass, Cedar, Chatham, Colfax, Concord, Craven, Day, Dean, Derry, Early, Elswald, Ellery, Goulding, Grand, Grandview, Hamill, Hazel, Henrietta, Jewett, Kay, Larch, Lily, Lisbon, Mawney, Mitchell, Montague, Niagara, Osborn, Penn, Plain, Plenty, Ridge, Rosedale, Second, Social, Spruce, Superior, Sweetbrier, Third, Van Zandt, Wadsworth and Wild streets, Affilcks, Arlington, Atlantic,

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Chapin, Claremont, Dexter, Fairmount, Highland, Home, Irving, Lexington, Pomona, Princeton, Rangely, Reservoir, Tuxedo and Washington avenues, in Duffy court, in Beckwith and Clarence streets, Lawn, Linwood, Narragansett and Union avenues, Town of Cranston, and in Lawn and Union avenues and Library court, Town of Johnston	21,819.92 feet.
Total	32,590.77 feet

or 6.17+ miles.

Water pipes were removed during the quarter, as follows:

6-INCH.

In Lily and Spruce streets	36.09 feet.

or .007— miles.

Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.00 feet.
30-inch	59,893.04 feet.
24-inch	43,418.92 feet.
20-inch	9,626.59 feet.
16-inch	31,922.58 feet.
12-inch	75,071.29 feet.
10-inch	14,652.26 feet.
8-inch	189,148.89 feet.
6-inch	830,459.90 feet.
Total	1,264,277.47 feet.

or 239.45— miles.

Twenty-eight fire hydrants were set during the quarter, one in each of the following locations:

Clarence street, Cranston, northeast corner of Orchard street.
Clarendon street, Cranston, northeast corner of Clarence street.
Concord street, east side, about 240 feet north of Frost street.
Cranston street, Cranston, west side, between Richard Fenner's house and Elm street.
Cranston street, Cranston, west side, between Richard Fenner's house and Elm street.
Cranston street, Cranston, west side, between Richard Fenner's house and Elm street.

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Cranston street, Cranston, west side, between Richard Fenner's house and Elm street.

Douglas avenue, northerly side, about 270 feet east of Sherwood street.

Eaton street, north side, at the westerly corner of Swan street.

Elmwood avenue, Cranston, west side, about 160 feet south of Fenner street.

Fenner avenue, east side, at the northerly corner of Akerman street.

Fort avenue, Cranston, west side, about 135 feet south of Ocean street.

George street, north side, about 115 feet west of Brook street.

Grand street, west side, about 450 feet south of Potter's avenue.

Gray street, east side, about 800 feet from angle in street.

Jewett street, north side, about 500 feet west of Senter street.

Narragansett avenue, Cranston, east side, at the southerly corner of Beckwith street.

Park avenue, Cranston, southwest corner of Elmwood avenue.

Park avenue, Cranston, south side, opposite Grace street.

Plainfield street, Johnston, southerly side, about 860 feet west of Andrews avenue.

Plainfield street, Johnston, southerly side, about 560 feet east of the junction of Thornton avenue and Plainfield street.

Plainfield street, Johnston, southerly side, opposite the junction of Thornton avenue and Plainfield street.

Sea View avenue, Cranston, west side, about 235 feet south of north line of estate of Benjamin J. Potter.

Shaw avenue, Cranston, northwest corner of Allen's avenue.

Smith street, Cranston, northeast corner of Germania avenue.

Sullivan street, north side, about 359 feet west of Hamilton street.

Union avenue, Johnston, north side, at the westerly corner of Whitehall street.

Union avenue, Johnston, north side, about 450 feet east of Webster avenue.

The total number of fire hydrants is now fourteen hundred and sixteen; thirteen hundred and ninety flush and twenty-six post hydrants.

The work of laying the following list of water pipes was in process at the close of the quarter:

No. of resolution.	Date of approval.	
365.	July 18, 1888,	*Mount Pleasant avenue, extension from Chalkstone avenue to Smith street. 1,213.5 feet of 12-inch pipe laid; the balance cannot be properly laid until the street is graded.*

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solution.	Date of approval.		
Jan.	3,	1891,	*High street, Hartford road and Rocky Hill avenue, Johnston:— 1,681.39 feet of 8-inch pipe laid in Hartford road, and 256.04 feet of 30-inch pipe in High street.*
Aug.	7,	"	*Plainfield street, Johnston, from Andrews avenue to Thornton Worsted Mills.*
Sept.	19,	"	*Cranston street, Cranston, from Elm street to Town Hall, in Knightsville.*

rk had not commenced upon laying water pipes in the ring streets, September 30, 1891:

solution.	Date of approval.		
Sept.	30,	1891,	*Plain and Cato streets, Cranston.*
"	"	"	*Lexington avenue, from Melrose street easterly.*
"	"	"	*Calla street, from Broad to Eddy.*
"	"	"	*Taylor street and Marlborough avenue.*
"	"	"	*Calla street, from Broad street westerly.*
"	"	"	*Depot avenue, Cranston, from end of pipe easterly.*
"	"	"	*Metcalf street, from end of pipe northerly.*
"	"	"	*Narragansett avenue, Cranston, from end of pipe southerly.*
"	"	"	*Orchard street, Cranston, from end of main to Clarence street.*
"	"	"	*Plain street, from end of pipe near Lockwood street southerly.*
"	"	"	*Rosedale and Ellery streets.*

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During the quarter one hundred and eighty-seven water meters were set, of which number seven were to replace other meters. The use of one meter was discontinued.

The following meters were in use at the close of the quarter:

Kind.	Size.							Total.
	⅝-in.	¾-in.	1-in.	1½in.	2-in.	3-in.	4-in.	
Ball & Fitts, piston	3,031	595	146	40	5	.....	.....	3,817
Ball & Fitts, rotary	.....	.....	22	24	3	5	3	57
Crown	4,669	648	173	77	20	6	4	5,597
Fales, Jenks & Sons	1	1	1	.....	.....	.....	.....	3
Thomson	247	25	7	5	2	.....	.....	286
Worthington	13	1	.....	.....	1	.....	1	16
	7,961	1,270	349	146	31	11	8	9,776

Five plumbers' licenses were issued during the quarter, making the total number seventy-seven, all of which expire December 31, 1891.

Eight hundred and fifty-four plumbing permits were issued during the quarter.

Two hundred and ninety-nine applications for water were made during the quarter, making the total number September 30, 1891, seventeen thousand one hundred and sixty-nine.

The number of new service stops opened during the quarter was two hundred and seventy-three.

The total number of service stops opened to September 30, 1891, inclusive, was sixteen thousand four hundred and fifty-two. The number in actual use September 30, 1891, was fifteen thousand five hundred and eighteen.

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The amount of bills approved on account of water works from July 1 to September 30, 1891, inclusive, was

For construction and extension, . . $47,793 66

Classified as follows:

Fruit Hill reservoir for repairs	$24,406 84
Laying water pipes	9,645 39
Cast iron water pipe	3,515 31
Fruit Hill reservoir, for construction	2,592 59
Service pipe	1,719 92
Stop valves	1,248 75
Special castings	1,120 78
Fire hydrants, boxes and covers	978 20
Laying service pipes	969 51
Labor on and carting pipe	711 56
Taps and stops	263 50
Barn expenses	226 02
Wharf salaries	178 50
Tools	153 21
Horses, wagons, harnesses, etc	63 58
	$47,793 66

For maintenance, ... $17,512 67

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$2,288 31	
Sundries	1,082 62	
Firemen	767 11	
Engineers	627 25	
Superintendence	247 91	
Care of grounds	199 50	
Lights	186 00	
Corliss pumping engine and house	178 16	
Oil, waste and packing	173 83	
Labor on fuel	99 15	
Worthington pumping engine	96 91	
Real estate	52 70	
Barn expenses	51 20	
Cornish pumping engine	3 15	
Amount carried forward		$6,053 80

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Amount brought forward		$3,[illegible]

Sockanosset Reservoir.

Watchman	$136 50	
Sundries	35 21	
		171 [illegible]

Hope Pumping Station.

Engineers	$575 25	
Firemen	513 77	
Hope pumping engine, No. 1	130 04	
Care of grounds	122 50	
Lights	94 00	
Oil, waste and packing	45 18	
Sundries	35 74	
Hope pumping engine, No. 2	20 21	
		1,[illegible]

Hope Reservoir.

Sundries	$1,288 87	
Watchman	204 75	
		1,[illegible]

Pipe Line and Service Stops.

Repairs	$2,025 01	
Superintendence—salaries	650 00	
		2,675

Meter Department.

Water meters	$1,150 36	
Setting and repairing meters	960 47	
		2,110

Miscellaneous.

Clerks' and inspectors' salaries	$2,704 57	
Telephone lines	281 56	
Barn expenses	240 87	
Analyses of water	111 00	
Horses, wagons, harnesses, etc	58 99	
Sundries	51 02	
Public drinking fountains and troughs	18 25	
Pipe yard, office expenses	4 75	
		3,47[illegible]
		$17,51[illegible]

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The amount of expenditures from July 1 to September 30, 1891, inclusive, was . . $65,306 33

The total expenditures to September 30, 1891, inclusive, were . . . $7,335,102 76

The *net* expenditure for construction and extension from July 1 to September 30, 1891, inclusive, was	$46,643 99
The *net* expenditure for construction and extension to September 30, 1891, inclusive, was	5,696,423 58
The *net* expenditure for maintenance from July 1 to September 30, 1891, inclusive was	11,881 41
The *net* expenditure for maintenance to September 30, 1891, inclusive, was	1,021,679 59

Bills deposited with the city treasurer for collection from July 1 to September 30, 1891, inclusive, amounted to $46,085 86

As follows:

Water	$39,819 37
Water meters	3,768 50
Setting and repairing meters	1,150 02
Rent of real estate	308 02
Old iron from Pettaconset pumping station	246 20
Penalties	38 00
Permanently closing service stops	20 00
Grass from Hope reservoir	15 00
Labor and materials, laying service pipes, etc	678 75
Boxing water pipes at Smith street bridge	30 00
Manure from barn	12 00
	$46,085 86

During the quarter coupons from bills collected have been returned by the city treasurer, and receipted for, amounting to . . . $42,513 50

As follows:

Water	$36,044 66
Water meters	3,768 50
Setting and repairing meters	1,286 04
Amount carried forward	$41,099 20

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Amount rought forward	$41,099 20
Rent of real estate	295 52
Old iron from Pettaconset pumping station	246 20
Penalties	38 00
Permanently closing service stops	20 00
Grass from Hope reservoir	15 00
Labor and materials, laying service pipes, etc	757 58
Boxing water pipes at Smith street bridge	30 00
Manure from barn	12 00
	$42,513 50

The amount of bills approved on account of water work for the fiscal year ending September 30, 1891, inclusive, wa

For construction and extension, . . $175,366 1

Charged as follows:

Fruit Hill reservoir, for repairs	$79,630 54
Fruit Hill reservoir, for construction	4,136 55
Cast-iron water pipe	39,338 28
Laying water pipes	23,321 64
Fire hydrants, boxes and covers	7,205 52
Special castings	4,174 15
Service pipes	3,969 85
Stop valves	3,508 50
Laying service pipes	3,144 89
Labor on and carting pipes	1,771 51
Taps and stops	1,645 15
Rent of wharf and pipe yard	1,250 00
Barn expenses	770 77
Wharf salaries	680 25
Tools	557 67
Horses, wagons, harnesses, etc	260 85
	$175,366 12

For maintenance, ... $80,288 3

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$7,301 89
Sundries	2,888 30
Firemen	2,529 32
Engineers	2,508 55
Amount carried forward	$15,228 06

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Amount brought forward	$15,228 06	
Superintendence	1,000 00	
Lights	791 50	
Real estate	644 00	
Care of grounds	629 45	
Labor on fuel	521 83	
Oil, waste and packing	516 55	
Corliss pumping engine and house	512 85	
Barn expenses	234 08	
Worthington pumping engine	105 94	
Cornish pumping engine	55 75	
Cornish engine house	28 86	
		$20,268 87

SOCKANOSSET RESERVOIR.

Watchman	$547 50	
Sundries	199 77	
		747 27

HOPE PUMPING STATION.

Engineers	$2,247 37	
Firemen	1,872 45	
Coal and wood	1,679 58	
Sundries	1,204 02	
Care of grounds	979 58	
Lights	447 25	
Hope pumping engine, No. 2	385 34	
Hope pumping engine, No. 1	205 18	
Oil, waste and packing	131 29	
		9,152 06

HOPE RESERVOIR.

Sundries	$4,229 09	
Watchman	833 65	
		5,062 74

PIPE LINE AND SERVICE STOPS.

Repairs	$5,309 47	
Superintendence—salaries	2,606 35	
		7,915 82

METER DEPARTMENT.

Water meters	$11,767 66	
Setting and repairing meters	4,093 50	
		15,861 16
Amount carried forward		$59,007 92

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Amount brought forward		$59,007 [illegible]

MISCELLANEOUS.

Clerks' and inspectors' salaries	$12,348 73	
Town of Cranston, tax	5,600 00	
Barn expenses	884 62	
Telephone lines	550 13	
Analyses of water	401 25	
Town of North Providence, tax	400 00	
Prevention of defilement of the Pawtuxet	368 03	
Sundries	212 74	
Horses, wagons, harnesses, etc	188 59	
Public drinking fountains and troughs	163 69	
Real estate at Pawtuxet	87 50	
Pipe yard, office expenses	58 36	
Town of Lincoln, tax	16 80	
		21,280 44
		$80,288 36

SEWERS.

During the quarter ending September 30, 1891, two hundred and five permits were issued to drain layers; one hundred and thirty-four for new work, and seventy-one for extension and repair of drains.

One drain-layer's license was issued during the quarter, making the total number twenty-nine, all of which expire December 31, 1891.

July 7th, the proposal of Smithfield Granite Company to furnish and deliver the cut granite for the outlet chamber of section one, for the improved sewerage system, was accepted. Amount, $600.

July 14th, the offer of George R. Newman to fill over the arch of the sewer in Blackstone park, was accepted.

July 24th, the proposal of New England Steam Brick Co. to furnish and deliver six hundred thousand bricks for the

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improved sewerage system was accepted, and a contract was subsequently executed. Amount, $5,100.

July 29th, the proposal of Durantaye & Rankin, of East Longmeadow, Mass., to furnish and deliver the cut sandstone for the outlet chamber of section one, for the improved sewerage system, was accepted, and a contract was subsequently executed. Amount, $975.

August 17th, the proposal of Frederick E. Shaw to furnish and deliver sewer pipes, etc., was accepted, and a contract for the same executed. Amount, $4,404.20.

August 20th, contracts for the construction of lateral sewers, which were subsequently executed, were awarded as follows, namely:

[The amounts given below are what are estimated will be paid the contractors for labor, and do not include cost of inspection and materials, or rock excavation.]

To Frederick E. Shaw.

No. of resolution.	Date of approval.		
403.	June 24, 1891,	*Halsey street, from Congdon street, about 140 feet easterly,* .	$91 40
404.	" " "	*Wilson street, from Fuller to Gilmore,* .	359 00
463.	July 21, "	*Jefferson street, from Common to Orms,* .	627 70

To John Keogh.

No. of resolution.	Date of approval.		
416.	July 7, 1891,	*Bowdoin, Appleton and Delaine streets,* .	$2,370 50
417.	" " "	*Gardner street, from Camp to Knowles,* .	542 80

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To George R. Newman.

No. of resolution.	Date of approval.		
371.	June 20, 1891,	*Perkins street, from Pearl to A,* . .	$1,030 95
425.	July 7, "	*Gesler street, from Vinton to Knight,* . .	836 40
487.	Aug. 7, "	*B street, from Cranston to Central,* . .	1,274 00
488.	" " "	*Hanover street, from Cranston to Dexter,* .	2,239 45

September 11th, a contract for the construction of the following lateral sewer, which was subsequently executed, was awarded as follows, namely:

To George R. Newman.

No. of resolution.	Date of approval.		
531.	Sept. 9, 1891,	*East street, from Arnold street northerly, about 100 feet,* . .	$202 00

During the quarter the construction of the following sewers was completed, namely:

No. of resolution.	Date of approval.		Date of completion.
		Elmwood Division, Section 5, Improved Sewerage System, .	June 14, 1891.
740.	Dec. 22, 1890,	*Manton avenue, from Amherst street to Joslin,* . . .	July 20, 1891.
79.	Feb. 5, 1891,	*Prospect street, from Halsey to Hidden,* .	Sept. 15, 1891.
80.	" " "	*Warren street, from Fuller to Dexter,* .	Aug. 1, 1891.

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No. of resolution.	Date of approval.		Date of completion.
139.	Mar. 21, 1891,	*Brownell street, from summit to Holden,*	Aug. 10, 1891.
140.	" " "	*Irving avenue, from Arlington to Taber,*	Aug. 12, 1891.
141.	" " "	*Smith, Davis and Jefferson streets,* .	Aug. 5, 1891.
157.	April 1, "	*Florence street, from Amherst to Manton avenue,* . .	Aug. 29, 1891.
158.	" " "	*Ford street, from Cranston to Dexter,*	July 18, 1891.
159.	" " "	*Julian street, from Amherst to Manton avenue,* . .	Aug. 25, 1891.
199.	" 14, "	*Dale street, from Atwell's avenue to West Exchange street,* . . .	Aug. 14, 1891.
200.	" " "	*Lily, Spruce and McAvoy streets,* .	Sept. 11, 1891.
211.	" 17, "	*East street, from end of sewer to Arnold street,* . . .	Aug. 18, 1891
212.	" " "	*Harrison, Wilson and Constitution streets,* . . .	Sept. 21, 1891.
239.	May 2, "	*Plenty street, from summit in Plenty to Broad,* . . .	July 6, 1891.
240.	" " "	*Woodland street, from Holden to Park,*	Sept. 1, 1891.
297.	" 21, "	*Hospital street, from South to Point,* .	Aug. 21, 1891.
404.	June 24, "	*Wilson street, from Fuller to Gilmore,*	Sept. 23, 1891.

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No. of resolution.	Date of approval.		Date of completion.
417.	July 7, 1891,	*Gardner street, from Camp to Knowles,*	Sept. 28, 1891.
531.	Sept. 9, "	*East street, from Arnold street northerly, about 100 feet,*	Sept. 29, 1891.

At the close of the quarter, work upon the following sewers of the Improved Sewerage System was in progress, namely:

Disposal Division, Iron Pipe Outlet Sewer.
Disposal Division, Section 1.
Elmwood Division, Section 2.
Elmwood Division, Section 6.
Elmwood Division, Section 7.
Elmwood Division, Section 8.
Elmwood Division, Section 9.

No. of resolution.	Date of approval.	
55.	Feb. 2, 1891,	*Dexter street, from Cranston to Potter's avenue.*
56.	" " "	*Hamilton, Irving and Melrose streets.*
57.	" " "	*Humboldt and Wayland avenues; thence through land deeded to the city to Butler avenue; thence through Blackstone Park to Seekonk River.*

Work upon the following lateral sewers was in progress at the close of the quarter, namely:

No. of resolution.	Date of approval.	
160.	April 1, 1891,	*Knowles street, from Pleasant to Cypress.*
198.	" 14, "	*Baker avenue, High street and Broadway.*

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No. of resolution.	Date of approval.	
296.	May 21, 1891,	*Greenwich, Oakland and Public streets.*
371.	June 20, "	*Perkins street, from Pearl to A.*
463.	July 21, "	*Jefferson street, from Common to Orms.*

Work upon the following sewers, completing the work ordered by the city council, had not commenced September 30, 1891, viz.:

No. of resolution.	Date of approval.	
238.	May 2, 1891,	*Congdon street, from Jenckes to Halsey.*
295.	" 21, "	*Cranston street, from Wendell to Bridgham.*
403.	June 24, "	*Halsey street, from Congdon about 140 feet easterly.*
416.	July 7, "	*Bowdoin, Appleton and Delaine streets.*
425.	" " "	*Gesler street, from Vinton to Knight.*
487.	Aug. " "	*B street, from Cranston to Central.*
488.	" " "	*Hanover street, from Cranston to Dexter.*
593.	Sept. 22, "	*Oakland street and Potter's avenue.*
594.	" " "	*Burnett street, from Greenwich to Dexter.*
595.	" " "	*Mawney street, from Greenwich to Dexter.*
617.	" 30, "	*Courtland and Gesler streets.*
618.	" " "	*Erastus street, from Atwell's avenue to Manton.*
619.	" " "	*Parade street, from Willow to Cranston.*
620.	" " "	*Wilson street, from Gilmore to Constitution.*

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The amount of bills approved on account of sewers from July 1 to September 30, 1891, inclusive, was

FOR CONSTRUCTION.

Regular appropriation	$50,385 73	
Improved sewerage appropriation	199,541 32	
		$249,927 05

Charged as follows:

Materials	$35,125 09
Rent of wharf and pipe yard	750 00
Testing cement	646 09
Sundries, improved sewerage system	478 10
Sundries	203 27
Tools	5 95
Sewer in Baker avenue, High street and Broadway	66 60
Sewer in Brownell street, from summit near Park to Holden	518 62
Sewer in Dale street, from Atwell's avenue to West Exchange street	441 12
Sewer in East street, from end of present sewer to Arnold	252 95
Sewer in East street, from Arnold street northerly about 100 feet	203 71
Sewer in Florence street, from Amherst to Manton avenue	3,741 97
Sewer in Ford street, from Cranston to Dexter	1,951 97
Sewer in Gardner street, from Camp to Knowles	1,480 54
Sewer in Greenwich, Oakland and Public streets	11,037 28
Sewer in Harrison, Wilson and Constitution streets	1,350 09
Sewer in Hospital street, from South to Point	439 56
Sewer in Irving avenue, from Arlington to Taber	619 08
Sewer in Jefferson street, from Common to Orms	615 77
Sewer in Julian street, from Amherst to Manton avenue	3,144 24
Sewer in Knowles street, from Pleasant to Cypress	2,649 21
Sewer in Lily, Spruce and McAvoy streets	1,732 81
Sewer in Manton avenue, from Amherst street to Joslin	1,943 01
Sewer in Perkins street, from Pearl to A	990 26
Sewer in Plenty street, from the summit to Broad	417 80
Sewer in Prospect street, from Halsey to Hidden	1,117 52
Sewer in Smith street, from State to Charles, and also to the river	73 67
Sewer in Smith, Davis and Jefferson streets	4,456 78
Sewer in Warren street, from Fuller to Dexter	1,378 84
Amount carried forward	$77,831 90

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Amount brought forward	$77,831 90
Sewer in Wilson street, from Fuller to Gilmore	28 35
Sewer in Woodland street, from Holden to Park	704 49
Sewer in Dexter street, from Cranston to Potter's avenue	24,048 35
Sewer in Disposal Division, Section 1	3,778 01
Sewer in Elmwood Division, Section 2	22,459 14
Sewer in Elmwood Division, Section 5	3,938 18
Sewer in Elmwood Division, Section 6	26,991 01
Sewer in Elmwood Division, Section 7	31,805 12
Sewer in Elmwood Division, Section 8	9,415 15
Sewer in Elmwood Division, Section 9	6,181 35
Sewer in Hamilton, Irving and Melrose streets	10,456 94
Sewer in Humboldt and Wayland avenues and Blackstone Park	17,862 55
Iron Pipe Outlet Sewer in Disposal Division	10,236 63
Contract reservations	4,189 88
	$249,927 05

For maintenance, ... $7,369 80

Charged as follows:

Cleaning basins and sewers	$3,810 12
Repairing basins and sewers	719 29
Horses, wagons, harnesses, etc.	590 74
Inspection of connections	564 37
Barn expenses	419 31
Cleaning and repairing old drains	371 59
Salary—superintendent	351 00
Tools	340 09
Sundries	90 56
Cleaning private connections	54 86
Telephone lines	39 40
Filling cisterns, etc.	18 47
	$7,369 80

The *net* expenditure for construction of sewers to September 30, 1891, inclusive, was	$2,664,435 15
The *net* expenditure for maintenance of sewers to September 30, 1891, inclusive, was	336,163 48

Bills deposited with the city treasurer for collection from July 1 to September 30, 1891, inclusive, amounted to $220 21

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As follows:

Cleaning private connections	$95 40
Labor building and repairing drains	46 13
Filling cisterns, etc	18 00
Use of pump	3 71
Sundries	2 00
Old hose	1 90
Pumping out Eddy street	1 00
Sewer material for building drains	52 07
	$220 21

During the quarter, coupons from bills collected have been returned by the city treasurer, and receipted for, amounting to . . . $425 0

As follows:

Cleaning private connections	$103 65
Labor building and repairing drains	46 13
Filling cisterns, etc	18 00
Use of pump	3 71
Sundries	2 00
Old hose	1 90
Pumping out Eddy street	1 00
Sewer material to New York, Providence and Boston Railroad Company	196 58
Sewer material for building drains	52 07
	$425 04

The amount of bills approved on account of sewers for th fiscal year ending September 30, 1891, inclusive, was

For Construction.

Regular appropriation	$101,739 28	
Improved sewerage appropriation	464,436 04	
		$566,175 3

Charged as follows:

Materials	$112,935 31
Tools	12,971 85
Testing cement	2,179 89
Sundries, improved sewerage system	2,071 05
Amount carried forward	$130,158 10

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Amount brought forward	$130,158 10
Rent of wharf and pipe yard	1,500 00
Sundries	203 27
Additional catch-basins	174 17
Clerk's salary	33 00
Sewer in Acorn street, from Atwell's avenue to West Exchange street	1,034 27
Sewer in Almy street, from High to Broadway	1,475 82
Sewer in Arlington avenue, from Irving to Angell street	2,751 67
Sewer in Asia street, from Arthur avenue to America street	513 67
Sewer in Atwell's avenue, from America street to Knight	320 23
Sewer in Baker avenue, High street and Broadway	66 60
Sewer in Broad street, from Stewart to Summer	701 11
Sewer in Brownell street, from summit near Park to Holden	518 62
Sewer in Clemence street, from Westminster 160 feet northerly	384 87
Sewer in Dale street, from Atwell's avenue to West Exchange street	441 12
Sewer in Dodge and Cranston streets	1,333 65
Sewer in East street, from end of present sewer to Arnold	252 95
Sewer in East street, from Arnold northerly about 100 feet	203 71
Sewer in Eddy street, from Tallman to Ship	294 88
Sewer in Florence street, from Amherst to Manton avenue	4,135 42
Sewer in Ford street, from Cranston to Dexter	2,273 12
Sewer in Gardner street, from Camp to Knowles	1,480 54
Sewer in Greenwich, Oakland and Public streets	11,037 28
Sewer in Harkness street, from High to Broadway	1,611 10
Sewer in Harrison, Wilson and Constitution streets	1,350 09
Sewer in Harvard avenue, from Taylor street westerly	595 20
Sewer in Hospital street, from South to Point	439 56
Sewer in Irving avenue, from Arlington to Taber	619 08
Sewer in Jefferson street, from Common to Orms	615 77
Sewer in Joslin street, from Atwell's avenue to Amherst street	1,405 72
Sewer in Julian street, from Amherst to Manton avenue	3,144 24
Sewer in Knight street, from the summit to Cranston	628 42
Sewer in Knowles street, from Pleasant to Cypress	2,649 21
Sewer in Lily, Spruce and McAvoy streets	1,732 81
Sewer in Manton avenue, from Amherst street to Joslin	4,387 53
Amount carried forward	$180,466 80

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Amount brought forward	$180,466 80
Sewer in Meader street, from Almy to Harkness	604 45
Sewer in Oak street; from the summit to Parade	424 79
Sewer in Parade street, from Willow to High	1,131 72
Sewer in Perkins street, from Pearl to A	990 26
Sewer in Plenty street, from the summit to Broad	1,022 64
Sewer in Prospect street, from Halsey to Hidden	1,117 52
Sewer in Smith street, from State to Charles, and also to the river	2,856 91
Sewer in Smith, Davis and Jefferson streets	5,245 97
Sewer in Sutton street, from the summit to Atwell's avenue	714 96
Sewer in Vinton street, from Asia to Atwell's avenue	1,350 93
Sewer in Warren street, from Fuller to Dexter	1,378 84
Sewer in Williams street, from the summit to Benefit	423 67
Sewer in Willow street, from Parade to Sycamore	904 06
Sewer in Wilson street, from Fuller to Gilmore	28 35
Sewer in Woodland street, from Holden to Park	704 49
Sewer in Young Orchard avenue, from Governor street to Ives	1,497 03
Sewer in Dexter street, from Cranston to Potter's avenue	26,068 87
Sewer in Disposal Division, Section 1	24,301 42
Sewer in Elmwood Division, Section 2	58,958 37
Sewer in Elmwood Division, Section 5	57,387 47
Sewer in Elmwood Division, Section 6	50,150 91
Sewer in Elmwood Division, Section 7	46,504 16
Sewer in Elmwood Division, Section 8	23,464 62
Sewer in Elmwood Division, Section 9	7,287 34
Sewer in Hamilton, Irving and Melrose streets	10,673 25
Sewer in Humboldt and Wayland avenues and Blackstone Park	22,759 58
Iron Pipe Outlet Sewer in Disposal Division	25,511 04
Contract reservations	12,244 88
	$566,175 32

For maintenance, ... $24,826 8

Charged as follows:

Cleaning basins and sewers	$11,284 20
Repairing basins and sewers	2,568 97
Cleaning and repairing old drains	2,236 17
Horses, wagons, harnesses, etc	1,962 32
Barn expenses	1,733 67
Inspection of connections	1,563 82
Amount carried forward	$21,349 15

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Amount brought forward	$21,349 15
Salary—superintendent	1,404 50
Tools	1,394 32
Cleaning private connections	222 71
Sundries	209 45
Filling cisterns, etc	167 54
Telephone lines	79 15
	$24,826 82

HIGHWAYS.

Seven permits to open streets were issued during the quarter.

July 11th, the offer of Providence Coal Company to furnish coal as required until April 1, 1892, to be taken from their yard, was accepted.

July 16th, the offer of John Garvey to furnish and deliver fifteen thousand feet granite curbing, was accepted. Amount, $9,300.

July 21st, the offer of Kenyon & Co., of Niantic, R. I., to cut and deliver five hundred square yards of paving blocks, was accepted. Amount, $775.

July 28th, the offer of Alexander Marr, of Westerly, R. I., to furnish and deliver one thousand square yards of paving blocks, was accepted. Amount, $1,550.

August 3d, the proposal of New England Steam Brick Company to furnish and lay brick paving in Eddy street, from Broad street to Westminster street, was accepted, and a contract was subsequently executed. Amount, about $1,000.

August 11th, the offer of Thomas Owens, of Westerly, R. I., to furnish and deliver one thousand feet granite curbing, was accepted.

August 25th, the offers of John Catto & Co., of Westerly, R. I., to cut and deliver granite paving blocks and curbing,

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and John E. Collins, of Westerly, R. I., to cut and deliver granite paving blocks and crosswalk stones, were accepted.

August 26th, the offer of Dixon & Co., of Westerly, R. I., to cut and deliver granite paving blocks, was accepted.

August 29th, the offer of The Millstone Granite Company, of Millstone, Conn., to cut and deliver granite paving blocks, was accepted. Amount, about $1,400.

August 31st, the offer of Smithfield Granite Company, to cut circular curb for entrance to Davis park, Chalkstone avenue, was accepted.

September 8th, the offer of John W. Mathewson & Son, to cut and deliver one thousand lineal feet granite curbing, was accepted. Amount, $650.

September 12th, the offer of The Millstone Granite Company, of Millstone, Conn., to cut and deliver a second cargo of granite paving blocks, was accepted. Amount, about $1,400.

September 15th, the offer of John Garvey to furnish and deliver from six thousand to seven thousand feet of granite curbing, was accepted.

September 15th, a contract was executed with John A. Dailey & Son to furnish and drive piles, etc., for Kinsley avenue.

September 22d, the offer of Garvey Brothers to cut and deliver in this city the circular curbing for gutters for Greenwich street, was accepted.

During the quarter the following streets have been repaired:

Atwell's avenue, from Aborn street to Knight.
Barclay street, from Federal to Atwell's avenue.
Bourn street, from Atwell's avenue westerly.
Cory street, from Federal to Atwell's avenue.

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Dean street, from High to Atwell's avenue.
Federal street, from Broadway to Dean.
Fountain street, from Aborn to Knight.
Governor street, from Wickenden to Pitman.
Kenyon street, from Federal to America.
Merrill street, from Federal to Atwell's avenue.
Pine street, from Richmond to Broad.
Richmond street, from Broad to Point.
Ringgold street, from Kenyon to Broadway.
Tockwotton street, from Benefit to East.
Tower street, from Federal to Atwell's avenue.
Valley street, from Orms to Hemlock.
West River street, from Hedley northerly.

Statements have been prepared of the cost of curbstones set, ascertained by the commissioner and certified to the board of aldermen for approval, as follows, viz.:

Joslin street, from Atwell's avenue to Manton avenue	$2,012 49
Beaufort street, from Academy avenue to Mt. Pleasant avenue	1,585 87
Taylor street, from Public to Glenham	256 99
Glenham street, from Broad to Prairie avenue	1,837 58
Dudley street, from Prairie avenue to Plain street	1,684 17
McKenna street, from Cross to Whelden	305 21
Broad street, east side, from end of curb south of Chester avenue to Public street	426 09
Chester avenue, from Prairie to Milk street	317 78
Taylor street, from Comstock avenue to Chester	797 11
Total	$9,223 29

During the quarter the following work was completed:

SIDEWALKS CURBED AND GUTTERS PAVED.

Date of order.

Oct. 17, 1889, *Pettis street, from North Main to Moshassuck river.*

Sept. 18, 1890, *Gallup street, from Prairie avenue to Ocean street.*

" " " *Redwing street, from Greenwich to Bucklin.*

" " " *Gaspee street, from Smith southerly to second angle in said street.*

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Date of order.			
Oct.	16,	1890,	*Sullivan street, from Greenwich to Hamilton.*
"	"	"	*Jessamine street, from Cranston to Salem.*
"	"	"	*Oxford street, from Harriet to Broad.*
Nov.	20,	"	*Atwell's avenue, from Hannah street to Manton avenue.*
"	"	"	*Bucklin street, from Carter to Earl.*
"	"	"	*Chalkstone avenue, from Manton bridge to Fruit Hill avenue.*
"	"	"	*Salisbury street, from Plain to Ocean.*
"	"	"	*Zone street, from Chalkstone avenue to Orms street.*
Dec.	18,	"	*Ford street, from end of curb to Dexter.*
"	"	"	*Peace street, from Broad to Greenwich.*
"	"	"	*Plenty street, from Broad to Greenwich.*
May	21,	1891,	*Williams street, from Ives to Gano.*
June	18,	"	*Eighth street, from Highland avenue to Pawtucket.*
"	"	"	*Chapin avenue, from Messer street to Norfolk.*
"	"	"	*John street, from Thayer to Brook.*

To be Paved with Granite Blocks.

No. of resolution.	Date of approval.		
735.	Dec. 22,	1890,	*Friendship street, from Beacon avenue to Summer street.*
369.	June 20,	1891,	*Olney street, north side, from North Main street easterly to turn-out of the U. R. R. Co.*
438.	July 20,	"	*Tockwotton street, from East to Ives.*

Curbstones to be Reset.

108.	Mar. 8,	1890,	*John street, from Benefit to Governor.*

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To be Built.

No. of resolution.	Date of approval.	
234.	May 2, 1891,	*Chapin avenue, from Messer street to Norfolk.*

To be Macadamized.

347.	June 16, 1891,	*Broadway, from Sabin street to Barton.*

To be Brought to Grade.

Date of order.		
March	5, 1891,	*Williams street, from Ives to Gano.*
April	2, "	*Back, Charles and Smith streets.*
May	1, "	*Eighth street, from Pawtucket avenue to Summit.*

To Take Possession of and Remove Obstructions.

Oct.	16, 1890,	*Peace street, from Broad to Greenwich.*
"	" "	*Plenty street, from Broad to Greenwich.*
"	" "	*Pettis street, from North Main to Shove.*
April	11, 1891,	*Greenwich street, from Bridgham to Lexington avenue.*
June	23, "	*Young avenue, from Smith street to Chalkstone avenue.*

To be Repaired.

No. of resolution.	Date of approval.	
585.	Sept. 20, 1890,	*Eddy street, from Westminster to Broad.*

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To be Put in Safe Condition.

Date of order.		
April 2, 1891,	*Eighth street, from Summit avenue to Pawtucket.*
June 29, "	*Stampers street, from North Main to Hewes.*

To Build Driveway.

No. of resolution.	Date of approval.	
289.	May 21, 1891,	*South Main street, corner of Coin, entrance to fire station.*

To Rebuild and Pave.

464. July 21, 1891, *Smith, Charles and Back streets.*

To Curb and Concrete Sidewalks.

512. Aug. 7, 1891, *Coin street, adjoining fire station.*

Sidewalks to be Concreted.

486.	Aug. 7, 1891,	*John street, from Benefit to Governor.*
536.	Sept. 9, "	*Broad street, from Chester avenue to Public street.*
536.	" " "	*Harold street, from Regent avenue to Valley street.*

The following work was in progress September 30, 1891, viz.:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
April 17, 1890,	*Hyat street, from Amherst to Kossuth:*— curbing set.

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s of order.

16, 1890, *Chalkstone avenue, from River to Ruggles street:*—roadway to roll and gutters to concrete.

20, " *River avenue, from Chalkstone to Valley street:*—roadway to roll and gutters to concrete.

18, " *Douglas avenue, from Admiral street to Branch avenue:*—in process.

15, 1891, *Western street, from Pleasant to Jenkins:*—curbing set.

18, " *Acorn street, from Kinsley avenue to Harris:*—curbing set.

To be Brought to Grade.

2, 1890, *Slater avenue, from Irving to President:*—grading not completed between Lloyd and President avenues.

16, " *King street, from Manton avenue to Sheridan street:*—in process.

4, " *Knowles street, from Cypress to Pleasant:*—in process.

To Take Possession of.

31, 1889, *King street, from Manton avenue to Sheridan street:*—work being done.

To be Built.

solution. Date of approval.

Oct. 28, 1890, *Kinsley avenue, from Gaspee street to Hemlock:*—in process.

Jan. 3, 1891, *Kinsley avenue, from Hemlock street to Eagle:*—in process.

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No. of resolution.	Date of approval.	
410.	June 30, 1891,	*Greenwich street, from Bridgh Lexington avenue:*—in process

LAND TO BE FILLED.

185.	April 14, 1891,	*Edward S. Cheney, Adelaide av* —in process.
186.	" " "	*Estate of Joseph J. Cooke, Ad avenue:*—in process.
187.	" " "	*William R. Randall, Ad avenue:*—in process.
188.	" " "	*Heirs of Adnah Sackett, Ad avenue:*—in process.
590.	Sept. 22, "	*Estate of Alfred Anthony, Ad avenue:*—in process.

TO BE PAVED.

469.	Aug. 4, 1891,	*Atwell's avenue, Manton avenu King street:*—in process.

The following work, ordered by the board of alde and city council, had not commenced September 30, namely:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
June 20, 1889,	*Butler avenue, from Blackstone pa President avenue.*
Nov. 20, 1890,	*Chalkstone avenue, from Mount Ple to Academy.*
Dec. 18, "	*Madison street, from Potter's aven land of N. Y. P. & B. R. R. Co. o east side, and on the west side to u 190 feet of the land of said company*

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Date of order.			
Jan.	15,	1891,	*Ashburton street, from Charles to Tremont.*
May	21,	"	*Hanover street, from Dexter westerly to the present end of curbing.*
"	"	"	*Kinsley avenue, from Gaspee street to Eagle.*
Sept.	17,	"	*Balaklava street, from Douglas avenue to Pekin street.*
"	"	"	*Bowdoin street, from Appleton to Kossuth.*
"	"	"	*Burnett street, from Bucklin to Dexter.*
"	"	"	*Bucklin street, from Hawthorne to Carter.*
"	"	"	*East Manning street, from Gano to Wayland.*
"	"	"	*Irving avenue, from Butler to Grotto.*
"	"	"	*Staniford street, from Public to Willard avenue.*
"	"	"	*Young Orchard avenue, from Governor street to Ives.*

To be Brought to Grade.

Jan.	15,	1891,	*Summit avenue, from Fourth street to Seventh.*
June	23,	"	*Elmwood avenue, from Roger Williams to the bridge over tracks of the N. Y. P. & B. R. R. Co.*
July	2,	"	*Hall street, from Northup avenue to northerly termination.*

To be Curbed and Sidewalks Concreted.

No. of resolution.	Date of approval.	
439.	July 20, 1891,	*Chalkstone and Fruit Hill avenues, adjoining school-house lot.*

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To be Put in Safe Condition.

Date of order.	
Sept. 17, 1891,	*River avenue, from Smith street to Chalkstone avenue.*

To be Paved with Granite Blocks.

No. of resolution.	Date of approval.	
529.	Sept. 9, 1891,	*Dorrance street, from Westminster to Friendship, and Weybosset street, from Dorrance to Orange.*
530.	" " "	*Cranston street, from near Winter to 140 feet south of Waverly street.*
613.	" 30, "	*Broad street, from Dorrance to Chestnut.*
633.	" " "	*Olney street, from North Main to Prospect.*

Sidewalks to be Concreted.

536.	Sept. 9, 1891,	*Atwell's avenue, from Sear's avenue to Woonasquatucket river.*
562.	" 19, "	*Cooke street, from Power to Waterman.*

To Build Driveway and Concrete Sidewalks.

610.	Sept. 30, 1891,	*East avenue, corner Olney street, entrances to fire station.*

Roadway to be Repaired.

612.	Sept. 30, 1891,	*Union street, from Westminster to Washington.*

To Replace Fence and Concrete Sidewalks.

632.	Sept. 30, 1891,	*Greenwich street and Trinity square, adjoining Grace Church Cemetery.*

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The amount of bills approved on account of highways from July 1 to September 30, 1891, inclusive, was as follows:

Regular appropriation	$26,789 54	
Special appropriation	133,021 36	
		$159,810 90

Classified as follows:

Cleaning streets	$13,906 08	
Repairs on unpaved streets	5,969 12	
Barn expenses	1,838 58	
Tools, implements, etc	1,039 91	
Salaries—superintendent and clerks	796 71	
Contract reservations	698 00	
Repairs on paved streets	692 79	
Crushed stone—material and labor	459 60	
Steam rollers—repairs and supplies	429 10	
Blacksmith and wheelwright shop	350 65	
Sundries	303 23	
Repairs on stone crushers	223 68	
Horses, wagons, harnesses, etc	103 00	
Telephone lines	36 40	
Fencing streets—material and labor	10 65	
Stone—paving and crosswalk	5 40	
Office expenses, city yard	1 00	
		26,863 90

NEW WORK—BUILDING AND REBUILDING STREETS, ETC., SIDEWALKS CURBED AND GUTTERS PAVED.

Acorn street, from Kinsley avenue to Harris	$1,216 39	
Atwell's avenue, from Hannah street to Manton avenue	3,236 33	
Bucklin street, from Carter to Earl	1,735 39	
Chalkstone avenue, from Manton bridge to Fruit Hill avenue	1,778 29	
Chalkstone avenue, from River to Ruggles street	8,915 10	
Chalkstone avenue, from Smith street to Ruggles	11 25	
Douglas avenue, from Admiral street to Branch avenue	8,438 72	
Eighth street, from Highland avenue to Pawtucket	1,200 29	
Ford street, from end of curbing now set to Dexter	2,632 13	
Gallup street, from Prairie avenue to Ocean street	1,145 66	
Gaspee street, from Smith southerly to second angle in Gaspee	4,429 65	
Hyat street, from Amherst to Kossuth	630 89	
Jessamine street, from Cranston to Salem	1,263 81	
Amounts carried forward	$36,633 90	$26,863 90

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Amounts brought forward	$36,633 90	$36,863 9
Madison street, from Potter's avenue to near land of the New York, Providence and Boston Railroad Company	146 75	
Oxford street, from Harriet to Broad	3,017 97	
Peace street, from Broad to Greenwich	3,744 16	
Pettis street, from North Main to Moshassuck river.	2 42	
Plenty street, from Broad to Greenwich	2,933 65	
Redwing street, from Greenwich to Bucklin	376 48	
River avenue, from Chalkstone to Valley street	6,711 21	
Salisbury street, from Plain to Ocean	1,525 88	
Sullivan street, from Greenwich to Hamilton	2,430 27	
Western street, from Pleasant to Jenkins	573 10	
Williams street, from Ives to Gano	1,853 67	
Zone street, from Chalkstone avenue to Orms street	1,500 40	
		61,449 8

PAVE WITH GRANITE BLOCKS.

Atwell's avenue, from Academy to Harris	$5,644 14	
Atwell's and Manton avenues and King street	1,974 64	
Dorrance and Weybosset streets	1,788 93	
Eddy street, from Public to Thurber's avenue	1,200 00	
Friendship street, from Beacon avenue to Summer street	1,424 80	
Olney street, north side, from North Main easterly to turnout of the Union Railroad Company	211 20	
Tockwotton street, from East to Ives	4,736 39	
		16,980 10

TO BE BUILT.

Chapin avenue, from Messer street to Norfolk	$3,095 09	
Eddy street, from railroad bridge to Broad	95 44	
Greenwich street, from Bridgham to Lexington avenue	10,919 21	
Kinsley avenue, from Gaspee street to Hemlock	8,654 74	
Kinsley avenue, from Hemlock street to Eagle	7,189 26	
		29,953 74

TO REBUILD AND PAVE.

Smith, Charles and Back streets	6,111 86

MACADAMIZE.

Broadway, from Sabin street to Barton	13,386 70
Amount carried forward	$154,746 16

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Amount brought forward		$154,746 16
To be Brought to Grade.		
Eighth street, from Pawtucket avenue to Summit	$1,312 49	
Knowles street, from Cypress to Pleasant	88 06	
Williams street, from Ives to Gano	690 96	
		2,091 51
To Repair.		
Eddy street, from Westminster to Broad		999 82
Curbstones to be Reset.		
John street, from Benefit to Governor		1,668 97
To Build Driveway.		
South Main street, corner of Coin, entrance to fire station		148 02
To Put in Safe Condition.		
Stampers street, from North Main to Hewes		156 42
		$159,810 90

Bills deposited with the city treasurer from July 1 to September 30, 1891, inclusive, amounted to $10,680 78

As follows:

Union Railroad Co., granite blocks, etc	$10,050 71
Labor and materials	507 32
Manure from barn	58 75
Use of steam roller	33 00
Removing trees	20 00
Old stone water trough	6 00
Pair of old wheels	3 00
Chopping blocks	2 00
	$10,680 78

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $7,631 72

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As follows:

Union Railroad Co. granite blocks, etc.	$6,984 82
Labor and materials	521 15
Manure from barn	58 75
Use of steam roller	33 00
Removing trees	23 00
Old stone water trough	6 00
Pair of old wheels	3 00
Chopping blocks	2 00
	$7,631 72

The amount of bills approved on account of highways for the fiscal year ending September 30, 1891, inclusive, was as follows:

Regular appropriation	$175,274 85	
Special appropriation	285,418 88	
		$460,693 73

Charged as follows:

Cleaning streets	$43,874 70	
Repairs on unpaved streets	28,957 62	
Crushed stone, material and labor	18,113 21	
Screening gravel	15,079 02	
Stone—paving and crosswalk	14,171 87	
Barn expenses	7,403 26	
Repairs on paved streets	6,611 35	
Salaries, superintendent and clerks	5,473 69	
Tools, implements, etc.	4,961 86	
Removing snow and ice	3,805 96	
Blacksmith and wheelwright shop	3,288 12	
Steam rollers—repairs and supplies	3,042 26	
Horses, wagons, harnesses, etc.	2,333 91	
Labor on materials	2,034 44	
Repairs on stone crushers	1,748 09	
Contract reservations	819 00	
Watchman at city yard	793 80	
Sundries	767 73	
Fencing streets—material and labor	155 69	
Telephone lines	78 28	
Office expenses, city yard	56 04	
		163,369 90
Amount carried forward		$163,[illegible]

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nount brought forward.....		$163,569 90

'ORK—BUILDING AND REBUILDING STREETS, ETC. SIDEWALKS CURBED AND GUTTERS PAVED.

ıreet, from Kinsley avenue to Harris.....	$1,216 39	
ɔ avenue, from extension of Melrose street to Elmwood avenue.....	613 74	
ɔ avenue, from Niagara street to Melrose.....	1,373 94	
ıvenue, from Kenyon street to Asia.....	781 22	
ı avenue, from Hannah street to Manton ave-.....	4,804 81	
t street, from Academy avenue to Mt. sant.....	4,811 18	
treet, east side, from end of curb south of ıter avenue to Public street.....	1,214 24	
street, from Carter to Earl.....	2,382 71	
ɔne avenue, from Manton bridge to Fruit Hill ıue.....	1,903 56	
ɔne avenue, from River to Ruggles street.....	9,499 90	
ɔne avenue, from Smith street to Ruggles....	1,305 83	
avenue, from Prairie to Milk street.....	567 78	
avenue, from Admiral street to Branch ave-.....	8,438 72	
ıreet, from Carleton to Mt. Pleasant avenue..	121 44	
street, from Prairie avenue to Plain street....	3,269 66	
ıtreet, from Highland avenue to Pawtucket...	1,200 29	
ɔet, from end of curbing now set to Dexter...	2,632 13	
ı avenue, from Chalkstone to Vale street....	1,544 53	
ıtreet, from Prairie avenue to Ocean street...	3,079 87	
street, from Smith southerly to second angle aspee.....	4,429 65	
ne street, from Broad to Baxter.....	472 30	
ı street, from Broad to Prairie avenue.....	3,712 50	
ı street, from Amherst to Amsterdam.....	1,585 11	
street, from Prospect to Brown.....	1,438 89	
ɔet, from Howard to Perry.....	547 21	
reet, from Amherst to Kossuth.....	711 12	
ı avenue, from Potter's to Beckwith street....	5,245 57	
ne street, from Cranston to Salem.....	3,830 02	
treet, from Atwell's avenue to Amherst street.	3,417 33	
ghn street, from Atwell's avenue to Amherst et.....	1,550 34	
ı street, from Potter's avenue to near land of New York, Providence and Boston Railroad ıpany.....	146 75	
ıa street, from Cross to Whelden.....	368 82	
street, from Harriet to Broad.....	5,012 30	
ıreet, from Broad to Greenwich.....	3,759 66	
mounts carried forward.....	$86,989 51	$163,569 90

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Amounts brought forward	$86,989 51	$163,569
Penn street, from Almy to Ridge	697 13	
Pemberton street, from Kendrick to Dover	2,717 61	
Pettis street, from North Main to Moshassuck river	767 52	
Plain street, from Potter's avenue to Pavilion	7,520 85	
Plenty street, from Broad to Greenwich	2,933 65	
Redwing street, from Greenwich to Bucklin	781 71	
River avenue, from Chalkstone to Valley street	6,711 21	
Salisbury street, from Plain to Ocean	1,611 51	
South Angell street, from end of curb to East River	306 97	
Sullivan street, from Greenwich to Hamilton	2,512 02	
Swan street, from Ocean to Plain	1,051 29	
Taylor street, from Comstock avenue to Chester	2,207 72	
Taylor street, from Public to Glenham	377 62	
Thayer street, east side, from Power to Williams	54 88	
Transit street, from Ives to Gano	237 89	
Washburn street, from Common to Orms	675 96	
Western street, from Pleasant to Jenkins	573 10	
Williams street, from Ives to Gano	1,853 67	
Young avenue, from Smith street to Chalkstone avenue	770 70	
Zone street, from Chalkstone avenue to Orms street	1,553 00	
		122,905

PAVE WITH GRANITE BLOCKS.

Atwell's avenue, from Academy to Harris	$17,048 44	
Atwell's and Manton avenues and King street	1,974 64	
Dorrance street, from Fulton to Washington east of railroad track	4,534 49	
Dorrance and Weybosset streets	1,788 93	
Eddy street, from Public to Thurber's avenue	23,463 85	
Friendship street, from Beacon avenue to Summer street	6,052 06	
Olney street, north side, from North Main easterly to turnout of Union Railroad Company	211 20	
Tockwotton street, from Ives to Gano	4,736 39	
Worcester street, from Cove to Eddy	189 94	
		59,999

TO BE BUILT.

Chapin avenue, from Messer street to Norfolk	$5,091 07	
Eddy street, from railroad bridge to Broad	3,398 89	
Greenwich street, from Bridgham to Lexington avenue	10,919 21	
Kinsley avenue, from Gaspee street to Hemlock	14,375 17	
Kinsley avenue, from Hemlock street to Eagle	13,937 03	
Melrose street, from Potter's avenue to Adelaide	4,109 29	
Smith street, from Ruggles to city line	1,787 93	
West Exchange street, from Cove to Ridge	89 18	
		53,707
Amount carried forward		$400,181

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Amount brought forward		**$400,181 13**

To Rebuild.

Dexter street, from High to Cranston	**$1,592 07**	
Douglas avenue, from Orms street to Vale	**7,433 60**	
Messer street, from High to Cranston	**577 63**	
Sherburne street, from Ocean to Eddy	**348 52**	
Sycamore street, from High to Chapin avenue	**1,087 74**	
		11,039 56

To Rebuild and Pave.

Smith, Charles and Back streets		**6,111 86**

To Macadamize.

Academy avenue, from Atwell's to Chalkstone	**$760 58**	
Broadway, from Sabin street to Barton	**14,326 83**	
Public street, from Eddy to Prairie avenue	**2,222 52**	
		17,309 93

To be Brought to Grade.

Burnett street, from Bucklin to Dexter	**$1,024 90**	
Chalkstone avenue, from Mt. Pleasant to Winthrop	819 35	
Eddy street, from railroad bridge to Broad	1,759 75	
Eighth street, from Pawtucket avenue to Summit	1,312 49	
Jackson avenue, lot belonging to Rachel Payne	129 75	
Knowles street, from Cypress to Pleasant	256 37	
Manton avenue, from end of horse car track at Dyerville to Chalkstone avenue	2,293 49	
Oregon street, from Fillmore to Borva	301 75	
River avenue, from Douglas to Admiral street	2,352 43	
Stanford street, from Public to Willard avenue	1,191 65	
Williams street, from Ives to Gano	690 96	
Young Orchard avenue, from Governor street to Ives	668 61	
		12,801 50

To Take Possession of and Remove Obstructions.

Academy avenue, from Chalkstone to northerly termination	$798 16	
Chapin avenue, near west side of Messer street	737 45	
Dexter street, from Cromwell to Potter's avenue	2,694 60	
Knight street, from Broadway to Atwell's avenue	499 70	
		4,729 91
Amount carried forward		$452,173 89

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Amount brought forward		$452,173 89

Curbing Removed and Reset.

John street, from Benefit to Governor	$1,668 97	
Power street, from Carrington's lane to Governor street	168 46	
Roanoke street, from Pemberton to Academy avenue	927 96	
Thayer street, from Transit to Williams	21 34	
Waldo street, westerly side of Cranston	90 76	
Williams street, from South Main to Governor	224 82	
Willow street, entrance to, west of Messer	86 92	
Valley street, opposite Felix	64 35	
		3,253 58

To Be Repaired.

Brighton street, from Knight to Courtland	$38 70	
Eddy street, from Westminster to Broad	999 82	
		1,038 52

To Put in Safe Condition.

Delahunt street	$36 30	
Stampers street, from North Main to Hewes	156 42	
		192 72

Build Driveways.

Richmond street, entrance to fire station	$217 05	
South Main street, corner of Coin, entrance to fire station	148 02	
		365 07

Gutters Concreted.

Angell street	$303 89	
Melrose street, from Potter's avenue to Adelaide	1,334 15	
Waterman street	1,472 03	
		3,110 07

Sidewalks Repaired.

Putnam street and Atwell's avenue, corner of	163 94

Raise Buildings.

West Exchange street, south side	[illegible]

Lands to be Filled.

Land of heirs of Adnah Sackett et al., on Adelaide avenue	[illegible]
	[illegible]

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SIDEWALKS AND CURBING.

The expenditures on account of sidewalks and curbing, from July 1 to September 30, 1891, inclusive, amounted to $12,944 93

Charged as follows:

Granite curbing	**$12,124 83**
Concreting sidewalks	**820 10**
	$12,944 93

Curbing bills deposited with the city treasurer for collection from July 1 to September 30, 1891, inclusive, amounted to $9,873 47

During the quarter, coupons from curbing bills collected have been returned by the city treasurer, and receipted for, amounting to . $7,426 12

The amount of bills approved on account of sidewalks and curbing for the fiscal year ending September 30, 1891, inclusive, was . $44,075 47

Charged as follows:

Granite curbing	$42,498 67
Concreting sidewalks	1,576 80
	$44,075 47

CITY ENGINEER.

Bills approved on account of city engineer's department, from July 1 to September 30, 1891, inclusive, amounted to $14,531 05

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Charged as follows:

Salary—city engineer	$1,250 00
Salaries of assistants	11,496 92
Salaries of clerks	754 00
Instruments and repairs	268 28
Supplies, drawing materials, etc	240 23
Horse-car tickets, etc	240 00
City engineer, for horse-hire	150 00
Horse-hire, barn expenses, etc	111 94
Sundries	19 68
	$14,531 05

Bills deposited with the city treasurer for collection from July 1 to September 30, 1891, inclusive, amounted to $18

As follows:

Steel tapes	$6 87
Brass tape and box	5 28
Set of sewer diagrams	4 00
Blue process paper	1 93
	$18 08

During the quarter, coupons from bills collected by the city treasurer have been returned and receipted for, amounting to . . . $18

As follows:

Steel tapes	$6 87
Brass tape and box	5 28
Set of sewer diagrams	4 00
Blue process paper	1 93
	$18 08

The amount of bills approved on account of the city engineer's department for the fiscal year ending September 30, 1891, inclusive, was $54,423

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Charged as follows:

Salary—city engineer	$5,000 00
Salaries of assistants	42,760 23
Salaries of clerks	2,979 56
Supplies, drawing materials, etc	1,160 54
Horse-car tickets, etc	895 80
Instruments and repairs	801 95
City engineer for horse-hire	600 00
Horse-hire, barn expenses, etc	121 84
Sundries	98 04
Meteorological instruments and repairs	6 60
	$54,423 96

BRIDGES.

July 21st, the proposal of R. F. Hawkins, of Springfield, Mass., to construct and set up an iron bridge over the West river at Hawkins street, was accepted, and a contract was subsequently executed. Amount, $1,299.

Bills approved on account of bridges from July 1 to September 30, 1891, inclusive, amounted to $6,919 98

Charged as follows:

Atwell's avenue bridge	$689 40
Barn expenses	62 80
Branch avenue bridge	6 03
Cemetery street bridge	5 63
Central or Red bridge	88 56
Charles street bridge	26 27
Crawford street bridge	105 96
Delaine street bridge	14 30
Eagle street bridge	26 73
Geneva bridge	1 80
Hawkins street bridge, to repair	25 45
Hawkins street bridge, to rebuild	2,036 99
Horses, wagons, harnesses, etc	42 12
Lumber, hardware, etc	222 94
Manton bridge	1 71
Mill street bridge	2 22
Park street bridge	23 16
Amount carried forward	$3,382 07

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Amount brought forward	$3,382 07
Point street bridge	229 47
Randall street bridge	26 80
Railroad Crossing street bridge	5 17
Rent of keeper's house, Washington bridge	30 00
Salaries—Point street bridge	1,012 25
Salaries—Washington bridge	526 44
Salaries—Red or Central bridge	467 25
Smith street bridge	4 30
Smithfield avenue bridge	5 37
Stevens street bridge	2 55
Sundries	108 97
Tar bridge (Manton avenue)	13 30
Telephone lines	42 00
Tools	85 57
Valley street bridge, north span	367 13
Valley street bridge, south span	257 16
Veazie street bridge	1 62
Wanskuck bridge	14 81
Washington bridge, near India Point	239 36
Washington bridge, over Providence river	10 73
West River street bridge	5 94
Whelden street bridge	81 72
	$6,919 98

Bills deposited with the city treasurer from July 1 to September 30, 1891, inclusive, amounted to $9

As follows:

Old lumber from various bridges	$9 50

During the quarter coupons from bills collected have been returned by the city treasurer, and receipted for, amounting to . . . $9

As follows:

Old lumber from various bridges	$9 50

The amount of bills approved on account of bridges for the fiscal year ending September 30, 1891, inclusive, was $23,263

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Charged as follows:

Atwell's avenue bridge	$692 28
Barn expenses	190 89
Branch avenue bridge	15 32
Branch avenue culvert	3 61
Building at city yard	15 85
Cemetery street bridge	15 73
Central or Red bridge	561 61
Charles street bridge	29 59
Crawford street bridge	908 69
Delaine street bridge	81 93
Eagle street bridge	51 94
Exchange bridge	290 93
Geneva bridge	4 70
Hawkins street bridge, to repair	30 52
Hawkins street bridge, to rebuild	2,036 99
Horses, wagons, harnesses, etc	157 78
Lumber, hardware, etc	643 16
Manton bridge	527 26
Mill street bridge	11 49
Nash lane bridge	1,371 30
Park street bridge	40 42
Point street bridge	2,489 99
Railroad Crossing street bridge	7 22
Randall street bridge	499 31
Rent of keeper's house, Washington bridge	120 00
Salaries—Point street bridge	4,018 75
Salaries—Washington bridge	2,043 88
Salaries—Red or Central bridge	1,850 25
Smith street bridge	230 24
Smithfield avenue bridge	43 98
Stevens street bridge	2 55
Sundries	338 87
Tar bridge (Manton avenue)	15 48
Telephone lines	42 00
Tools	493 68
Valley street bridge, north span	367 13
Valley street bridge, south span	257 16
Veazie street bridge	26 47
Wanskuck bridge	30 98
Washington bridge, near India Point	2,508 41
Washington bridge, over Providence river	50 33
West River street bridge	63 04
Whelden street bridge	82 21
	$23,263 92

ROBERT E. SMITH,

Commissioner.

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THIRTY-SIX
QUARTERLY RE

OF THE

DEPARTMENT OF PUBL

OF THE

CITY OF PROVIDENCE, R

QUARTER ENDING DECEMBER 31

The Providence Press:
Snow & Farnham, City Printers,
37 Custom House Street.
1892.

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THIRTY-SIXTH QUARTERLY REPORT

OF THE

DEPARTMENT OF PUBLIC WORKS

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING DECEMBER 31, 1891.

The Providence Press:
SNOW & FARNHAM, CITY PRINTERS,
37 Custom House Street.
1892.

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REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., January 1, 1892.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the thirty-sixth quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and the cost of same, for the quarter ending December 31, 1891.

The ordinance approved June 29, 1885, prohibiting all departments of the city government from delivering materials until a sum of money sufficient to cover the purchase of such materials shall have been deposited with the city treasurer, should be amended so that all amounts now received should be credited to the appropriation where they properly belong.

As the ordinance now stands, all railroad companies and other corporations, as well as private parties, that desire to make any improvement to their property or estates, first receive an estimate from the Department of Public Works, and are required to deposit a sum of money with the City Treasurer sufficient to cover the cost of the labor and materials for such improvement. This department has to furnish the materials and labor for such work, and the expense of the same is charged to the appropriation of the department doing the work; while the amounts received are not placed

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to the credit of the appropriation from which the cost is paid. It has also been the general custom in ordering special work, such as building driveways and concreting sidewalks in front of fire and police stations and school estates, to direct that the expense attending the same be likewise charged to the appropriation for highways, instead of the appropriation of the department having control of the property. The cost of all this work during the year aggregates a large amount and is continually increasing.

These facts taken into consideration with the small appropriation for highways for the present year, will make it exceedingly difficult to accomplish the work required of the department in the proper care and maintenance of its streets. In addition to the above named extra work, the Highway Department is required to remove the snow after each storm from the sidewalks in front of sixty-eight school estates, also from the walks in and around several of the public parks, the Dexter Donation, and other city property. While this department is willing to do all of the work that is required of it, we think that the cost of removing snow from the sidewalks should be charged to the appropriations for school houses and lots, public parks, and the other several departments for which the work is done, instead of the appropriation for highways. Then if the ordinance referred to should be so amended as to give the credit where it properly belongs, each department would show the exact expense of running the same.

By Resolution No. 655, approved October 28, 1890, the Commissioner of Public Works was directed to forthwith build Kinsley avenue, from Gaspee street to Hemlock street. The avenue has been completed from Hemlock street to the city stables, which are built within the lines laid out for the remainder of the above named avenue.

In a communication under the date of June 15, 1891, the Commissioner called the attention of the City Council to the necessity of providing a new location for the buildings of

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this department. As nothing has yet been decided with reference to the matter, either the buildings that prevent the work of building Kinsley avenue will have to be moved to a new site or the completion of this important highway indefinitely delayed.

WATER WORKS.

October 8th, the offer of Whittier Machine Co. to furnish and deliver on board cars in this city one hundred six-inch and twenty-five eight-inch water gates, was accepted. Amount, $2,606.25.

December 1st, the offer of Providence Steam and Gas Pipe Co. to furnish and deliver one thousand service box lock covers, was accepted. Amount, $290.00.

December 1st, the offer of John W. Lyon to furnish and deliver taps, stops, etc., was accepted. Amount, $1,708.00.

December 1st, the offer of Congdon, Carpenter & Co. to furnish and deliver twenty-five tons pure pig lead, was accepted. Amount, $2,250.00.

December 1st, the offer of Thomas Phillips & Co. to furnish and deliver seventeen and one-half tons lead pipe of various sizes, and five hundred pounds of pig tin, was accepted. Amount, $1,865.00.

December 1st, the offer of L. H. Tillinghast & Co. to furnish and deliver seventeen and one-half tons lead pipe of various sizes, and five hundred pounds of pig tin, was accepted. Amount, $1,865.00.

December 2nd, the offer of Fales & Jenks Machine Co. to furnish and deliver eighty hydrants, and eighty-five hydrant boxes, was accepted. Amount, $11,350.00.

December 2nd, the offer of Whittier Machine Co., of South Boston, Mass., to furnish and deliver the following water gates, was accepted, viz.:

25	4 inch gates,		20	8 inch gates,	
50	6 "	"	2	12 "	"

Amount, $1,905.

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December 15th, the proposal of R. D. Wood & Co., of Philadelphia, Pa., to furnish and deliver the following cast iron water pipes was accepted, and a contract was subsequently executed, namely:

100	4-inch A pipe.
5,000	6-inch B pipe.
500	8-inch A pipe.
500	8-inch B pipe.
100	12-inch A pipe.

Amount, $32,188.81.

The average daily consumption of water during the last quarter was 7,516,550 gallons, and the average daily consumption for the year 1891, was 7,272,070 gallons.

Water pipes were laid during the quarter, as follows:

12-INCH.

In Mount Pleasant avenue	31.06 feet.

8-INCH.

In Plain and Pontiac streets and Montgomery avenue, in Cranston street, Town of Cranston, and in Plainfield street, Thornton avenue and Old Killingly road, Town of Johnston	10,152.72 feet.

6-INCH.

In Amherst, Calla, Case, Commodore, Danforth, East Manning, Ellery, Hanover, Hudson, Kay, Lisbon, Madison, Metcalf, Pearl, Peter, Pine, Rosedale, Taylor and Woodbine streets, Alabama, Atlantic, Lexington, Marlborough and Princeton avenues, Old road and Shimbo alley, in Cato, Orchard and Plain streets, Depot and Narragansett avenues, Town of Cranston, and in Rocky Hill road, Town of Johnston	10,429.89 feet.
Total	20,613.67 feet.

or 3.90+ miles.

Statement of sizes and lengths of pipe laid since the commencement of the work:

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ach	10,084	feet.
ach	59,893.04	feet.
ach	43,418.92	feet.
ach	9,626.59	feet.
ach	31,922.58	feet.
ach	75,102.35	feet.
ach	14,652.26	feet.
ach	199,301.61	feet.
ach	840,889.79	feet.
Total	1,284,891.14	feet.

243.35+ miles.

The total length of water pipes laid during the year ending cember 31, 1891, was 17.59 miles.

Fifteen fire hydrants were set during the quarter, one at ch of the following locations:

Calla street, northerly side, at the easterly corner of Bernard street.
Cranston street, Cranston, north side, at the east corner of Elm street.
Danforth street east side, about 560 feet north of angle in street.
Madison street, west side, at the south end of the street.
Old Killingly road, Johnston, northeast side, about 130 feet west of Lyman avenue.
Old Killingly road, Johnston, northeast side, about 360 feet west of angle in road.
Plain street, west side, about 375 feet south of Lockwood street.
Plain street, west side, about 80 feet north of Pearl street.
Plain street, Cranston, east side, at the junction of Benedict street.
Plainfield street, Johnston, north side, about 70 feet west of bridge at Pocasset brook.
Plainfield street, Johnston, north side, about 320 feet east of Atwood avenue.
Plainfield street, Johnston, north side, about 130 feet west of Atwood avenue.
Rocky Hill road, Johnston, west side, opposite the south line of Eutaw street.
Sheldon street, Cranston, north side, at the west corner of Commercial street.
Thornton avenue, Johnston, south side, about 1,400 feet west of the junction of Plainfield street and Thornton avenue.

During the quarter, one fire hydrant was removed from the llowing location:

Charles street, northwest corner of Borva street.

The total number of fire hydrants is now fourteen hunred and thirty; fourteen hundred and one flush and twentyine post hydrants.

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The work of laying the following list of water pipes was in process at the close of the quarter:

No. of resolution.	Date of approval.		
775.	Jan. 3,	1891,	*High street, Hartford road and Rocky Hill avenue, Johnston:—1,681.39 feet of 8-inch pipe laid in Hartford road, and 256.04 feet of 30-inch pipe in High street.*
577.	Sept. 19,	"	*Cranston street, Cranston, from Elm street to Town Hall, in Knightsville.*
744.	Nov. 20,	"	*Ohio avenue, from Eddy street to Maryland avenue.*

Work had not commenced upon laying water pipes in the following streets, December 31, 1891:

No. of resolution.	Date of approval.		
758.	Nov. 20,	1891,	*Canton street, from Chalkstone avenue to Linton street.*

During the quarter two hundred and twelve water meters were set, of which number six were to replace other meters. The use of ten meters was discontinued.

The following water meters were in use at the close of the quarter:

Kind.	Size.							[illegible]
	⅝-in.	¾-in.	1-in.	1½-in.	2-in.	3-in.	4-in.	[illegible]
Ball & Fitts, piston	3,033	595	148	38	5	.....	.....	3,[illegible]
Ball & Fitts, rotary	.....	.....	22	24	3	5	3	[illegible]
Crown	4,756	654	173	76	20	6	4	5,[illegible]
Fales, Jenks & Sons	1	1	1	.....	.....	.....	.....	[illegible]
Thomson	333	34	9	9	2	1	.....	[illegible]
Worthington	13	1	.....	.....	1	.....	1	[illegible]
	8,136	1,285	353	147	31	12	8	9,[illegible]

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One plumber's license was issued during the quarter, making the total number seventy-eight, all of which expire December 31, 1891.

Nine hundred and one plumbing permits were issued during the quarter.

Two hundred and forty-seven applications for water were made during the quarter, making the total number December 31, 1891, seventeen thousand four hundred and sixteen.

The number of new service stops opened during the quarter was two hundred and sixty-eight.

The total number of service stops opened to December 31, 1891, inclusive, was sixteen thousand seven hundred and twenty. The number in actual use December 31, 1891, was fifteen thousand seven hundred and twenty-three.

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The following table shows the lengths, sizes, etc., of services laid during fifteen years ending December 31, 1891.

YEARS.	Lengths of Services Laid in Feet.									Taps Used.						Stop Used.						Service Boxes Used.
	Sizes of Pipes.						Totals.	Trenching.	Paving.													
	½ inch.	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	1½ inch.				½ in.	⅝ in.	¾ in.	⅞ in.	1 in.	Total.	½ in.	⅝ in.	¾ in.	⅞ in.	1 in.	Total.	
1877....	2,776.8	8,679.3	1,884.4	248.8	114.2	7.	13,710.5	14,422.44	2,105.67	173	571	114	15	6	879	173	571	114	15	6	879	896
1878....	2,209.8	6,881.8	1,436.6	119.4	120.7	35.3	10,803.6	11,365.38	1,659.34	133	427	91	7	13	671	148	464	91	7	12	722	725
1879....	1,624.9	6,107.5	874.4	275.7	66.2	7.	8,955.7	9,421.4	1,375.52	101	335	57	17	9	519	109	380	60	17	9	575	572
1880 ...	2,163.6	5,951.2	1,150.	483.6	186.1	16.9	9,951.4	10,468.87	1,528.45	136	334	66	25	17	578	141	358	67	26	17	609	603
1881....	1,078.9	6,269.4	741.1	253.1	233.4	8.4	8,584.3	9,067.2	1,330.6	68	392	55	21	18	554	71	411	47	17	18	564	559
1882....	.....	8,073.8	581.3	226.4	92.	32.	9,005.3	9,481.5	1,020.	....	511	49	17	15	592	...	525	41	15	14	595	610
1883....	9.	8,075.83	761.09	143.	131.9	60.	9,180.82	9,649.5	1,284.5	1	508	61	12	14	596	2	537	44	10	13	606	629
1884....	.....	8,048.72	732.2	266.3	119.6	23.2	9,190.02	9,715.5	1,054.6	...	512	64	18	17	611	....	539	51	15	13	618	641
1885....	33.9	7,971.78	667.1	106.4	34.	28.4	8,841.58	9,283.	1,109.5	....	490	48	11	7	556	1	519	32	5	6	563	586
1886....	23.	7,764.6	699.5	115.4	98.6	25.4	8,726.5	9,213.5	965.5	....	481	64	13	12	570	....	518	49	7	11	585	609
1887....	.....	8,381.8	456.6	81.4	75.8	20.2	9,015.8	9,422.	1,164.1	....	516	47	11	11	585	....	543	32	7	10	592	612
1888....	.....	7,496.6	553.6	66.8	105.2	55.8	8,278.	8,768.	1,072.5	....	495	52	9	10	566	....	519	39	5	10	573	587
1889....	.....	9,211.9	514.2	109.	90.2	8.2	10,023.5	10,563.	1,125.5	...	546	53	18	10	627	....	579	37	12	6	634	664

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The following table shows the lengths, sizes, etc., of services laid during the year ending December 31, 1891:

Months.	Lengths of Services Laid in Feet.								Taps Used.					Stops Used.					Service boxes used.
	Sizes of Pipes.					Totals.	Trenching.	Paving.											
	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	1½ inch.				½ in.	⅝ in.	¾ in.	1 in.	Total.	½ in.	⅝ in.	¾ in.	1 in.	Total.	
January	50.8	11.	.....	.....	.....	61.8	66.	3.	3	1	1	....	5	4	1	....	....	5	5
February	121.6	.....	.....	58.7	30.	210.3	203.5	36.	8	....	...	3	11	8	....	....	3	11	11
March	507.	26.4	8.2	.....	.....	541.6	571.	70.5	35	2	1	....	38	35	2	1	...	38	38
April	1,557.3	180.4	8.2	28.4	.....	1,774.3	1,862.5	185.5	80	19	3	3	105	94	12	1	2	109	119
May	1,185.5	55.	.....	.....	.....	1,240.5	1,408.5	122.5	80	5	....	1	86	82	5	....	....	87	88
June	1,159.5	69.	8.2	20.2	23.5	1,280.4	1,318.5	177.5	74	9	2	2	87	80	5	1	2	88	94
July	1,278.6	54.3	78.3	16.4	.....	1,427.6	1,462.	177.	68	6	5	2	81	73	4	4	2	83	87
August	1,331.8	16.4	33.4	82.8	.....	1,464.4	1,532.5	107.5	69	4	7	6	86	81	2	3	6	92	98
September	1,709.2	42.6	66.3	.....	.....	1,818.1	1,920.5	108.	102	5	6	....	113	114	3	4	....	121	125
October	1,577.36	226.6	16.4	8.2	.....	1,828.56	1,925.5	218.	94	17	2	1	114	100	14	2	1	117	123
November	994.1	54.8	.....	16.4	.....	1,065.3	1,100.5	114.	59	5	....	2	66	63	4	....	2	69	70
December	1,058.52	229.	18.2	80.8	.....	1,386.52	1,445.	125.5	57	15	3	4	79	63	14	2	4	79	86
Total	12,531.28	965.5	237.2	311.9	53.5	14,099.38	14,816.	1,445.	729	88	30	24	871	797	66	18	22	903	944

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The following table shows the lengths, sizes, etc., of services laid during fifteen years ending December 31, 1891.

YEARS.	Lengths of Services Laid in Feet.									Taps Used.						Stop Used.						Service Boxes Used.
	Sizes of Pipes.						Totals.	Trenching.	Paving.													
	½ inch.	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	1½ inch.				¾ in.	½ in.	⅝ in.	¾ in.	1 in.	Total.	¾ in.	½ in.	⅝ in.	¾ in.	1 in.	Total.	
1877....	2,776.8	8,679.3	1,884.4	248.8	114.2	7.	13,710.5	14,422.44	2,105.67	173	571	114	15	6	879	173	571	114	15	6	879	896
1878....	2,209.8	6,881.8	1,436.6	119.4	120.7	25.3	10,803.6	11,365.38	1,659.34	133	427	91	7	13	671	148	461	91	7	12	722	725
1879....	1,624.9	6,107.5	874.4	275.7	66.2	7.	8,955.7	9,421.4	1,375.52	101	335	57	17	9	519	109	380	60	17	9	575	572
1880 ...	2,163.6	5,951.2	1,150.	483.6	186.1	16.9	9,951.4	10,468.87	1,528.45	136	334	66	25	17	578	141	358	67	26	17	609	603
1881....	1,078.9	6,269.4	741.1	251.1	233.4	8.4	8,584.3	9,067.2	1,330.6	68	392	55	21	18	554	71	411	47	17	18	564	559
1882....	.....	8,073.8	581.3	226.4	92.	32.	9,005.3	9,481.5	1,020.	....	511	49	17	15	592	....	525	41	15	14	595	610
1883....	9.	8,075.83	761.09	143.	131.9	60.	9,180.82	9,649.5	1,284.5	1	508	61	12	14	596	2	537	44	10	13	606	629
1884....	.....	8,048.72	732.2	266.3	119.6	23.2	9,190.02	9,715.5	1,054.6	...	512	64	18	17	611	....	539	51	15	13	618	641
1885....	33.9	7,971.78	667.1	106.4	34.	28.4	8,841.58	9,283.	1,109.5	....	490	48	11	7	556	1	519	32	5	6	563	586
1886....	23.	7,764.6	699.5	115.4	98.6	25.4	8,726.5	9,213.5	965 .5	....	481	64	13	12	570	....	518	49	7	11	585	609
1887....	.....	8,381.8	456.6	81.4	75.8	20.2	9,015.8	9,422.	1,164.1	....	516	47	11	11	585	....	543	32	7	10	592	612
1888....	.....	7,496.6	553.6	66.8	105.2	55.8	8,278.	8,768.	1,072.5	....	495	52	9	10	566	....	519	39	5	10	573	587
1889....	.....	9,211.9	514.2	199.	90.2	8.2	10,023.5	10,563.	1,125.5	...	546	53	18	10	627	....	579	37	12	6	634	664
1890....	.....	8,997.8	671.3	194.7	241.6	61.2	10,166.6	10,792.5	1,183.	....	549	58	17	16	640	....	586	42	11	15	654	680
1891....	.....	12,531.28	965.5	237.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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The following table shows the lengths, sizes, etc., of services laid during the year ending December 31, 1891:

Months.	Lengths of Services Laid in Feet.								Taps Used.					Stops Used.					Service boxes used.
	Sizes of Pipes.					Totals.	Trenching.	Paving.											
	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	1½ inch.				½ in.	⅝ in.	¾ in.	1 in.	Total.	½ in.	⅝ in.	¾ in.	1 in.	Total.	
January	50.8	11.	.....	.....	.....	61.8	66.	3.	3	1	1	....	5	4	1	....	....	5	5
February	121.6	.....	.....	58.7	30.	210.3	203.5	36.	8	....	...	3	11	8	....	....	3	11	11
March	507.	26.4	8.2	.....	.....	541.6	571.	70.5	35	2	1	....	38	35	2	1	...	38	38
April	1,557.3	180.4	8.2	28.4	.....	1,774.3	1,862.5	185.5	80	19	3	3	105	94	12	1	2	109	119
May	1,185.5	55.	.....	.....	.....	1,240.5	1,408.5	122.5	80	5	....	1	86	82	5	....	....	87	88
June	1,159.5	69.	8.2	20.2	23.5	1,280.4	1,318.5	177.5	74	9	2	2	87	80	5	1	2	88	94
July	1,278.6	54.3	78.3	16.4	.....	1,427.6	1,462.	177.	68	6	5	2	81	73	4	4	2	83	87
August	1,331.8	16.4	33.4	82.8	.....	1,464.4	1,532.5	107.5	69	4	7	6	86	81	2	3	6	92	98
September	1,709.2	42.6	66.3	.....	.....	1,818.1	1,920.5	108.	102	5	6	....	113	114	3	4	....	121	125
October	1,577.36	226.6	16.4	8.2	.....	1,828.56	1,925.5	218.	94	17	2	1	114	100	14	2	1	117	123
November	994.1	54.8	.....	16.4	.....	1,065.3	1,100.5	114.	59	5	....	2	66	63	4	....	2	69	70
December	1,058.52	229.	18.2	80.8	.....	1,386.52	1,445.	125.5	57	15	3	4	79	63	14	2	4	79	86
Total	12,531.28	965.5	237.2	311.9	53.5	14,099.38	14,816.	1,445.	729	88	30	24	871	797	66	18	22	903	944

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Changes in size and location of services in 1891.

Taps and Stops.										Sizes and Lengths of Lead Pipe.													
Taken Out.					Inserted.					Taken Out.					Inserted.				Trenching.	Paving.	Change in size only.	Change in location only.	Change in both size and location.	Removed.
⅜ inch.	½ inch.	⅝ inch.	¾ inch.	1 inch.	⅜ inch.	½ inch.	⅝ inch.	¾ inch.	1 inch.	½ inch.	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	⅝ inch.	¾ inch.	1 inch.	1¼ inch.						
33	22	4	2	3	.....	28	8	12	6	480.02	266.27	64.	8.2	23.4	436.7	102.4	178.9	92.5	1159.5	381.2	32	13	9	12

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The following table exhibits the number of service stops opened each month from the commencement to December 31, 1891.

Months.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.
January.	.....	54	33	21	34	55	15	49	9	20	7	17	15	21	17	18	26	7	39	36	39
February	.....	47	18	18	7	25	23	18	9	19	3	11	9	10	7	15	7	10	21	25	26
March.	.....	38	34	63	7	45	32	60	19	46	23	39	11	28	9	24	16	14	19	28	24
April	.....	109	109	108	32	108	82	78	52	58	55	49	55	62	48	68	60	38	61	53	73
May.....	.....	224	206	147	162	168	136	95	80	84	66	72	78	62	62	61	70	52	74	66	114
June.....	.....	329	295	151	172	148	114	103	71	109	82	48	64	81	81	59	50	86	59	80	83
July.....	.....	333	261	127	141	158	83	80	49	75	56	77	66	76	77	83	62	89	74	67	85
August	.....	224	209	123	83	94	91	51	51	39	58	87	69	61	57	71	49	52	56	76	95
September ...	.....	184	147	139	101	94	80	63	44	37	60	67	93	50	70	59	74	63	64	77	93
October.....	.....	138	135	160	92	84	81	78	79	48	61	56	47	65	62	52	80	70	64	54	104
November....	.....	100	104	185	86	54	73	57	63	54	37	64	49	51	39	57	69	47	58	72	81
December....	56	83	45	122	60	35	55	45	47	29	40	27	56	44	46	28	49	42	53	50	83
Totals.....	56	1,863	1,596	1,364	977	1,068	865	777	573	618	548	614	612	611	575	595	612	570	642	684	900

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The receipts for water each year since the commencement have been as follows:

Year.	Amount.	Year.	Amount.
1872	$41,003 51	1882	$269,318 77
1873	97,386 09	1883	283,632 89
1874	132,052 39	1884	302,368 36
1875	165,144 71	1885	313,561 21
1876	183,868 73	1886	323,084 67
1877	200,039 39	1887	339,513 60
1878	218,883 33	1888	346,731 58
1879	229,551 78	1889	377,497 97
1880	247,705 06	1890	401,140 86
1881	260,530 87	1891	404,553 84

The amount of bills approved on account of water works, from October 1 to December 31, 1891, inclusive, was:

For construction and extension, . . $42,912.67

Classified as follows:

Cast iron water pipe	$12,915 54
Fruit Hill Reservoir, for repairs	10,507 38
Laying water pipes	5,151 16
Fruit Hill reservoir, for construction	3,026 64
Stop valves	2,492 60
Service pipes	2,102 60
Fire hydrants, boxes and covers	1,764 14
Laying service pipes	1,250 93
Special castings	1,244 22
Rent of wharf and pipe yard	750 00
Contract reservations	490 37
Labor on and carting pipe	446 55
Taps and stops	267 29
Wharf salaries	175 50
Barn expenses	165 44
Tools	128 33
Horses, wagons, harnesses, etc	33 98
	$42,912 67

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For maintenance, ... $28,099.51

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$2,773 02	
Sundries	838 64	
Firemen	680 70	
Engineers	627 25	
Care of grounds	332 98	
Superintendence	248 56	
Lights	183 00	
Labor on fuel	109 13	
Oil, waste and packing	108 11	
Real estate	63 50	
Barn expenses	56 44	
Worthington pumping engine	22 48	
Corliss pumping engine and house	19 49	
Cornish pumping engine	3 52	
		$6,066 82

SOCKANOSSET RESERVOIR.

Watchman	$136 50	
Sundries	11 00	
		147 50

HOPE PUMPING STATION.

Engineers	$575 25	
Firemen	418 60	
Lights	127 25	
Care of grounds	42 55	
Hope pumping engine, No. 1	38 29	
Sundries	31 47	
Oil, waste and packing	29 43	
		1,262 84

HOPE RESERVOIR.

Sundries	$382 94	
Watchman	204 75	
		587 69

PIPE LINE AND SERVICE STOPS.

Repairs	$1,784 23	
Superintendence—salaries	650 00	
		2,434 23
Amount carried forward		$10,499 08

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Amount brought forward		$10,

METER DEPARTMENT.

Water meters	$5,440 84	
Setting and repairing meters	1,043 59	
		6,

MISCELLANEOUS.

Town of Cranston tax	$5,923 00	
Clerks' and inspectors' salaries	3,439 01	
Prevention of defilement of the Pawtuxet	438 19	
Town of North Providence tax	400 00	
Horses, wagons, harnesses, etc	314 65	
Barn expenses	263 80	
Telephone lines	113 55	
Analyses of water	94 95	
Sundries	44 35	
Real estate at Pawtuxet	35 00	
Pipe yard, office expenses	28 75	
Town of Lincoln tax	15 75	11,
		$28,

The amount of expenditures from October 1 to December 31, 1891, inclusive, was . . $71,01

The total expenditures to December 31 1891, inclusive, were $7,406,11

The *net* expenditure for construction and extension from October 1 to December 31, 1891, inclusive, was	$41
The *net* expenditure for construction and extension to December 31, 1891, inclusive, was	5,737,
The *net* expenditure for maintenance from October 1 to December 31, 1891, inclusive, was	21
The *net* expenditure for maintenance to December 31, 1891, inclusive, was	1,043

Bills deposited with the city treasurer for collection, from October 1 to December 31, 1891, inclusive, amounted to $34,7

As follows :

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Water	$26,660 11
Water meters	4,760 50
Setting and repairing meters	1,277 05
Real estate	325 52
Permanently closing service stops	35 00
Penalties	20 00
Repairing service pipe	3 25
Labor and materials, laying water pipes to State Home and School	1,336 36
Labor and materials, laying service pipes, etc	336 54
	$34,754 33

During the quarter coupons from bills collected have been returned by the city treasurer, and receipted for, amounting to . . . $45,999 67

As follows:

Water	$37,820 49
Water meters	4,735 50
Setting and repairing meters	1,419 87
Real estate	315 52
Permanently closing service stops	45 00
Penalties	20 00
Repairs on service pipe	3 25
Labor and materials, laying water pipes to State Home and School	1,336 36
Labor and materials, laying service pipes, etc	303 68
	$45,999 67

SEWERS.

During the quarter ending December 31, 1891, two hundred and ten permits were issued to drain layers; one hundred and forty-six for new work, and sixty-four for extension and repair of drains.

One drain-layer's license was issued during the quarter, making the total number thirty, all of which expire December 31, 1891.

October 14th, the proposal of F. H. Peabody & Son, Agents, to furnish the wood and iron work for the filth-hoist well of section 2, for the improved sewerage system, was accepted. Amount, $230.00.

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November 6th, the offer of Long Island Brick Co. to furnish and deliver one cargo of about one hundred and twenty-five thousand sewer brick, was accepted. Amount, about $875.00.

November 23d, the proposal of Winslow & Co., of Portland, Maine, to furnish and deliver sewer-pipes, etc., was accepted and a contract was subsequently executed. Amount, $24,387.39.

November 23d, the proposal of Manchester & Hudson to furnish and deliver flagstones, was accepted, and a contract was subsequently executed. Amount, $1,720.00.

November 23d, the proposal of John Garvey to furnish and deliver three hundred sets of catch-basin stones, was accepted, and a contract was subsequently executed. Amount, $7,500.00.

November 23d, the proposal of Long Island Brick Co. to furnish and deliver six hundred thousand brick, was accepted, and a contract was subsequently executed. Amount, $4,350.00.

November 24th, the proposal of New England Steam Brick Co. to furnish and deliver nine hundred thousand brick, was accepted, and a contract was subsequently executed. Amount, $7,425.00.

December 2d, the offer of Smithfield Granite Co. to furnish skew-back and sill-stones for the improved sewerage system, was accepted. Amount, $137.00.

During the year ending December 31, 1891, there have been constructed about 6.721 miles of pipe, and 0.947 miles of brick sewers, making a total of 7.668 miles of sewers built, which, added to the length previously constructed—67.38 miles—makes a total length of sewers at date, 75.048 miles.

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The total length of pipe sewers to December 31, 1891, was 53.581 miles and 21.467 miles of brick sewers. 183 catch-basins have been built during the year, making the total to date 2,431.

October 13th, contracts for the construction of lateral sewers, which were subsequently executed, were awarded as follows, namely:

[The amounts given below are what are estimated will be paid the contractors for labor, and do not include cost of inspection and materials, or rock excavation.]

To Frederick E. Shaw.

No. of resolution.	Date of approval.				
593.	Sept.	22,	1891,	*Oakland street and Potter's avenue,* .	$1,621 80
594.	"	"	"	*Burnett street from Greenwich to Dexter,*	1,597 50
619.	"	30,	"	*Parade street from Willow to Cranston,*	1,587 05
620.	"	"	"	*Wilson street from Gilmore to Constitution,* . . .	355 90

To John Keogh.

595.	Sept.	22,	1891,	*Mawney street, from Greenwich to Dexter,*	$1,659 60
617.	"	30,	"	*Courtland and Gesler streets,* . .	2,711 95
618.	"	"	"	*Erastus street, from Atwell's avenue to Manton avenue,* .	451 15

October 13th, a contract for the construction of the following sewer for the improved sewerage system was awarded and subsequently executed, namely:

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To Frederick E. Shaw.

No. of resolution.	Date of approval.		
654.	Oct. 6, 1891,	*Delaine street, from Manton avenue to the river,* . . .	$8,806 50

November 12th, a contract for the construction of the following lateral sewer, which was subsequently executed, was awarded as follows, namely:

To John Keogh.

No. of resolution.	Date of approval.		
690.	Nov. 7, 1891,	*Cranston street, from Bridgham to Dodge,*	$412 60

During the quarter the construction of the following sewers was completed, namely:

No. of resolution.	Date of approval.		Date of completion.
55.	Feb. 2, 1891,	*Dexter street, from Cranston to Potter's avenue,* . .	Dec. 2, 1891.
57.	" " "	*Humboldt and Wayland avenues; thence through land deeded to the city to Butler avenue; thence through Blackstone Park to Seekonk River,* .	Nov. 5, 1891.
160.	April 1, "	*Knowles street, from Pleasant to Cypress,*	Oct. 21, 1891.
198.	" 14, "	*Baker avenue, High street and Broadway,*	Oct. 17, 1891.
238.	May 2, "	*Congdon street, from Jenckes to Halsey,*	Dec. 5, 1891.

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No. of resolution.	Date of approval.		Date of completion.
295.	May 21, 1891,	*Cranston street, from Wendell to Bridgham,*	Dec. 2, 1891.
371.	June 20, "	*Perkins street, from Pearl to A,*	Oct. 2, 1891.
403.	" 24, "	*Halsey street, from Congdon about 140 feet easterly,*	Nov. 9, 1891.
425.	July 7, "	*Gesler street, from Vinton to Knight,*	Nov. 28, 1891.
463.	" 21, "	*Jefferson street, from Common to Orms,*	Oct. 1, 1891.
487.	Aug. 7, "	*B street, from Cranston to Central,*	Oct. 23, 1891.
488.	" " "	*Hanover street, from Cranston to Dexter,*	Nov. 14, 1891.
593.	Sept. 22, "	*Oakland street and Potter's avenue,*	Nov. 24, 1891.
594.	" " "	*Burnett street, from Greenwich to Dexter,*	Nov. 6, 1891.
617.	" 30 "	*Courtland and Gesler streets,*	Dec. 29, 1891.
618.	" " "	*Erastus street, from Atwell's avenue to Manton,*	Dec. 23, 1891.
620.	" " "	*Wilson street, from Gilmore to Constitution,*	Dec. 1, 1891.
690.	Nov. 7, "	*Cranston street, from Bridgham to Dodge,*	Nov. 27, 1891.

At the close of the quarter, work upon the following sewers of the improved sewerage system was in progress, namely:

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Disposal Division, Iron Pipe Outlet Sewer.
Disposal Division, Section 1.
Elmwood Division, Section 2.
Elmwood Division, Section 6.
Elmwood Division, Section 7.
Elmwood Division, Section 8.
Elmwood Division, Section 9.

No. of resolution.	Date of approval.	
56.	Feb. 2, 1891,	*Hamilton, Irving and Melrose streets.*
654.	Oct. 6, "	*Delaine street, from Manton avenue to the river.*

Work upon the following lateral sewers was in progress at the close of the quarter, namely:

No. of resolution.	Date of approval.	
296.	May 21, 1891,	*Greenwich, Oakland, and Public streets.*
416.	July 7, "	*Bowdoin, Appleton and Delaine streets,*

Work upon the following sewers, completing the work ordered by the city council, had not commenced December 31, 1891, viz.:

No. of resolution.	Date of approval.	
595.	Sept. 22, 1891.	*Mawney street, from Greenwich to Dexter,*
619.	" 30, "	*Parade street, from Willow to Cranston.*
665.	Oct. 16, "	*Chapin avenue from summit to Cranston street.*
666.	" " "	*Waverly street, from Cranston to Dexter.*
667.	" " "	*Westfield street, from Harrison to Dexter.*

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No. of resolution.	Date of approval.	
691.	Nov. 7, 1891,	*Butler avenue, from 100 feet north of Douglas street to Pitman.*
692.	" " "	*Cranston street, from Wendell to Potter's avenue.*
693.	" " "	*Earl street, from Greenwich to Section 9, Improved Sewerage System.*
694.	" " "	*Irving and Butler avenues.*
695.	" 7, "	*Linwood avenue, from Cranston street to Dexter.*
696.	" " "	*Potter's avenue, from Cranston street to Dexter.*
723.	" 10, "	*Gordon avenue, Prairie avenue, Logan avenue and Ocean street.*
741.	" 20 "	*Common street, from Jefferson to Mulberry.*
742.	" " "	*Hudson street, from summit to Parade.*
766.	Dec. 7, "	*C street, from Lester to Central.*
767.	" " "	*Carter street, from Greenwich to Bucklin.*
791.	" 22, "	*Prairie avenue, from Public street to Colfax.*
813.	Jan. 2, 1892,	*Hammond street, from Gilbert to Cranston.*
814.	" " "	*Hyat street, from Amherst to Manton avenue.*
815.	" " "	*Sprague street, from Greenwich to Dexter.*

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SEWER MAINTENANCE DEPARTMENT.

The following table shows the work performed by the department cleaning sewers and sand-catchers for the year 1891.

Months.	Old Work.					New Work.											Total deposit removed, cubic yards.
	Old Drains.			Sand Catchers.		Open Ditches.			Sewers.			Catch-Basins.			Trapped.		
	Number.	Length in feet.	Deposit removed, cu. yds.	Number.	Deposit removed, cu. yds.	Number.	Length in feet.	Deposit removed, cu. yds.	Number.	Length in feet.	Deposit removed, cu. yds.	No. times examined.	No. times cleaned.	Deposit removed, cu. yds.	From hydrant.	By rain or snow.	
January	5	50	.60	.....	.....	1	200	18.50	24	5,425	3.	1	265	255.	101	164	277.10
February	12	160	7.25	.....	.....	.....	.....	.....	22	6,100	29.25	1	258	421.50	98	160	458.
March	33	400	17.	.....	.....	.....	.....	.....	18	180	6.	2	381	658.01	156	225	681.01
April	.....	.....	.....	2	11.75	.....	.....	.....	.....	.....	.....	1	674	871.33	358	316	883.08
May	3	285	52.85	.....	.....	.....	.....	.....	.....	.....	.....	1	704	792.55	248	456	845.40
June	13	130	4.90	.....	.....	.....	.....	.....	13	1,263	119.20	2	744	860.60	404	340	984.70
July	15	150	3.50	1	17.66	.....	.....	.....	16	470	4.90	2	835	1,121.70	578	257	1,147.76
August	2	.....	1.55	.....	.....	.....	.....	.....	32	16,325	14.50	1	889	961.	468	421	997.05
September	1	.....	9.	1	9.	.....	.....	.....	.....	.....	.....	2	961	1,244.	693	268	1,262.
October	1	100	27.20	.....	.....	.....	.....	.....	12	2,570	86.55	1	787	918.30	461	306	1,027.05
November	.....	.....	.....	3	9.	.....	.....	.....	.....	.....	.....	2	638	591.	332	226	600.
December	20	560	88 30	5	10.	4	.....	86.	35	13,438	153.50	1	507	414.	235	272	751.80
Totals	105	1,835	207.15	12	57.41	5	200	104.50	172	45,771	416.90	17	7,663	9,129.	4,132	3,531	9,914.95

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The amount of bills approved on account of sewers from October 1 to December 31, 1891, inclusive, was

FOR CONSTRUCTION.

Regular appropriation	$35,488 22	
Improved sewerage appropriation	227,967 41	
		$263,455 63

Charged as follows:

Materials	$13,190 04
Testing cement	876 14
Additional catch-basins	848 27
Sundries, improved sewerage system	797 26
Tools	26 17
Sundries	2 25
Sewer in Baker avenue, High street and Broadway	1,762 00
Sewer in B street, from Cranston to Central	1,393 59
Sewer in Bowdoin, Appleton and Delaine streets	99 60
Sewer in Burnett street, from Greenwich to Dexter	1,701 64
Sewer in Courtland and Gesler streets	2,956 42
Sewer in Congdon street, from Jenckes to Halsey	3,075 78
Sewer in Cranston street, from Bridgham to Dodge	424 12
Sewer in Cranston street, from Wendell to Bridgham	4,305 88
Sewer in Delaine street, from Manton avenue to the river	3,574 21
Sewer in Erastus street, from Atwell's avenue to Manton	805 30
Sewer in Gesler street, from Vinton to Knight	788 85
Sewer in Greenwich, Oakland and Public streets	4,219 44
Sewer in Halsey street, from Congdon about 140 feet easterly	791 93
Sewer in Hanover street, from Cranston to Dexter	2,271 80
Sewer in Jefferson street, from Common to Orms	3 50
Sewer in Knowles street, from Pleasant to Cypress	882 74
Sewer in Oakland street and Potter's avenue	1,735 15
Sewer in Perkins street, from Pearl to A	6 00
Sewer in Wilson street, from Fuller to Gilmore	349 92
Sewer in Wilson street, from Gilmore to Constitution	347 25
Sewer in Dexter street, from Cranston to Potter's avenue	18,297 89
Sewer in Disposal Division, Section 1	2,568 80
Sewer in Elmwood Division, Section 2	16,142 25
Sewer in Elmwood Division, Section 6	51,088 19
Sewer in Elmwood Division, Section 7	22,090 27
Sewer in Elmwood Division, Section 8	27,641 71
Sewer in Elmwood Division, Section 9	28,490 86
Sewer in Hamilton, Irving and Melrose streets	25,146 63
Amount carried forward	$238,701 85

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Amount brought forward	$238,701 85	
Sewer in Humboldt avenue, Wayland avenue and Blackstone park	9,131 44	
Iron pipe outlet sewer in Disposal Division, Section 1	9,745 46	
Contract reservations	5,518 39	
Grading Ernest street, from Eddy to Allen's avenue	358 49	
	$263,455 63	

For Maintenance, ... $7,649 5

Charged as follows:

Cleaning basins and sewers	$3,287 39	
Cleaning and repairing old drains	1,027 78	
Repairing basins and sewers	872 00	
Tools	613 12	
Inspection of connections	571 27	
Barn expenses	496 07	
Salary, superintendent	351 00	
Horses, wagons, harnesses, etc	279 71	
Sundries	88 68	
Cleaning private connections	56 85	
Filling cisterns, etc	4 20	
Telephone lines	1 50	
	$7,649 57	

The *net* expenditure for construction of sewers to December 31, 1891, inclusive, was	$2,927,365 5
The *net* expenditure for maintenance of sewers to December 31, 1891, inclusive, was	$343,692 1

Bills deposited with the city treasurer for collection from October 1 to December 31, 1891, inclusive, amounted to . . . $259 2

As follows:

Cleaning private connections	$114 10	
Building and cleaning catch-basins for Old Colony Railroad Co	89 32	
Old sewer stones	7 50	
Setting switch for Union Railroad Co	5 00	
Filling cisterns, etc	4 00	
Old hose	1 00	
Laying drains to curb	24 10	
Testing cement	10 80	
Old man-hole frame and cover	3 40	
	$259 22	

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During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $259 22

As follows:

Cleaning private connections	$114 10	
Building and cleaning catch-basins for Old Colony Railroad Co	89 32	
Old sewer stones	7 50	
Setting switch for Union Railroad Co	5 00	
Filling cisterns, etc	4 00	
Old hose	1 00	
Laying drains to curb	24 10	
Testing cement	10 80	
Old man-hole frame and cover	3 40	
		$259 22

HIGHWAYS.

Three permits to open streets were issued during the quarter.

October 21st, the offer of H. Nole, of North Uxbridge, Mass., to furnish and deliver six hundred lineal feet of granite curbing, was accepted. Amount, $390.00.

October 26th, the proposal of New England Paving Co., of Boston, Mass., to pave, with rock asphalt, Union street, from Westminster street to Washington street, was accepted and a contract was subsequently executed. Amount, $1,649.36.

November 3d, the offer of Oakland Granite Co. to furnish and deliver one thousand lineal feet of granite curbing, was accepted. Amount, $650.00.

December 9th, the offer of Oakland Granite Co. to furnish and deliver twenty-five hundred lineal feet of fourteen-inch cross-walk stone, was accepted and a contract was subsequently executed. Amount, $1,112.50.

December 9th, the proposal of Joseph H. West, of Franklin, Maine, to furnish and deliver twenty-five thousand lineal

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feet straight curbing, was accepted, and a contract was subsequently executed. Amount, $15,250.00.

December 9th, the proposal of Crabtree & Havey, of Sullivan, Maine, to furnish and deliver thirty thousand lineal feet of straight curbing, was accepted, and a contract was subsequently executed. Amount, $18,450.00.

December 9th, the proposal of John Garvey to furnish and deliver one thousand lineal feet circular curbing, ten-foot radius, and one thousand lineal feet circular curbing, eight-foot radius, was accepted, and a contract was subsequently executed. Amount, $1,580.00.

December 9th, the proposal of Kenneth McKay to furnish and deliver one hundred curb corners, two-foot radius, and twenty-five hundred lineal feet fourteen-inch cross-walk stone, was accepted, and a contract was subsequently executed. Amount, $1,275.00.

December 9th, the proposal of William Booth, of New London, Conn., to furnish and deliver ten thousand square yards of granite paving blocks, was accepted, and a contract was subsequently executed. Amount, $15,250.00.

December 11th, the offer of Oakland Granite Co. to furnish and deliver about seven hundred lineal feet straight curbing, was accepted. Amount, about $427.00.

December 12th, the offer of Kenneth McKay to furnish and deliver five thousand square yards granite paving blocks, was accepted, and a contract was subsequently executed. Amount, $7,625.00.

December 15th, the offer of John E. Collins, of Westerly, R. I., to furnish and deliver ten thousand square yards granite paving blocks, was accepted, and a contract was subsequently executed. Amount, $15,250.00.

December 16th, the offer of John Garvey to furnish and deliver paving blocks at same rate as was paid to other parties furnishing the city, was accepted.

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During the quarter the following streets have been repaired:

Academy avenue, from Smith street to Chalkstone avenue.
Admiral street, from Oriental to Whipple.
Ambrose street, from Oregon to Chalkstone avenue.
Armington avenue, from Academy to Pemberton street.
Atwell's avenue, at junction of Manton.
Barnes street, from Thayer to Brown.
Borden street, from Hospital to Plain.
Branch avenue, from Thurber's lane to Smithfield avenue.
Branch avenue, from Douglas to Vandewater street.
Broad street, from Friendship to Public.
Burgess street, from High to Cranston.
Chalkstone avenue, from Manton to Aldine street.
Crary street, from Hospital to Plain.
Douglas avenue, from Admiral street 600 feet southerly.
Douglas avenue, from Branch to city line.
East avenue, from Cypress street to North.
Eddy street, from Ship to Tallman's lane.
Federal street, from Fountain to Sabin.
Fenner avenue, from Cranston street to the brook.
Fruit Hill avenue, from Chalkstone to Woonasquatucket.
Hawkins street, from Charles to new bridge.
Hope street, from Olney to Angell.
India street, at the foot of Hope.
Julian street, from Manton avenue to Putnam street.
Linden street, from Broad to Friendship.
Manton avenue, from Julian street to fire station.
Mount Pleasant avenue, from Dover street to Chalkstone avenue.
Myrtle street, from Broad to Pine.
North street, from North Main to Olney.
Olney street, from Cypress to Cole avenue.
Oriental street, from Admiral to new road of N. Y., P. & B. R. R. Co.
Printery street, from Randall to Whelden.
Valley street, from Hemlock 600 feet westerly.
Veazie street, from Admiral to Woodward road.
Wickenden street, from Governor to Ives.
Woodward road, from Branch avenue to city line.

During the quarter earth gutters have been built in the following streets, namely:

Ashburton street, from Tremont to Charles.
Ashmont street, from Ocean to Eddy.
Fenner avenue, from Cranston street to the brook.
Linwood avenue, from near Union to Long pond.
Waverly street, from Cranston street to Long pond,
Wayne street, from Candace to Douglas avenue.

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During the quarter statements of the cost of concreting sidewalks, with ten per centum added to cover cost of assessing and collecting, were certified to the assessors of taxes, viz.:

Broad street, from Chester avenue to Public street	$295 81
John street, from Benefit to Governor	194 37
Harold street, from Regent avenue to Valley street	403 96
Cooke street, from Power to Waterman	137 33
Wesleyan avenue, from Broad street to Taylor	184 31
Atwell's avenue, from Sear's avenue to Woonasquatucket river	467 04
Total	$1,682 82

In addition to the general patching necessary to maintain the streets in good repair, the following work has been done during the year ending December 31, 1891, namely:

New streets built	48,904 lineal feet.
Curbing set	83,171 lineal feet.
Streets rebuilt	16,200 lineal feet.
Streets resurfaced	53,400 lineal feet.
Streets graded	27,985 lineal feet.
Block pavement laid	34,060 square yards.
Cobble pavement laid	4,850 square yards.
Rock asphalt pavement laid	824.68 square yards.
Brick pavement laid	457.41 square yards.
Streets repaved	12,242 square yards.
Concrete gutters and roadways built	31,548.8 square yards.
Asphalt gutters and roadways built	8,628.42 square yards.
Concrete sidewalks laid	11,485.07 square yards.
Asphalt sidewalks laid	195.54 square yards.

December 3, 1891, the following order of the board of aldermen was rescinded, namely:

Date of order.

June 20, 1889, *Butler avenue, from Blackstone park to President avenue:*—sidewalks to be curbed and gutters paved.

During the quarter the following work was completed:

SIDEWALKS CURBED AND GUTTERS PAVED.

Date of order.

Oct. 16, 1890, *Chalkstone avenue, from River to Ruggles street.*

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Date of order.		
Nov.	20, 1890,	*River avenue, from Chalkstone to Valley street.*
Dec.	18, "	*Douglas avenue, from Admiral street to Branch avenue.*
"	" "	*Madison street, from Potter's avenue to land of N. Y. P. & B. R. R. Co. on the east side, and on the west side to within 190 feet of the land of said company.*
Jan.	15, 1891,	*Western street, from Pleasant to Jenkins.*
June	18, "	*Acorn street, from Kinsley avenue to Harris.*
Sept.	17, "	*Balaklava street, from Douglas avenue to Pekin street.*
"	" "	*East Manning street, from Gano to Wayland.*
"	" "	*Staniford street, from Public to Willard avenue.*
"	" "	*Young Orchard avenue, from Governor street to Ives.*
Oct.	15, "	*Chalkstone avenue from Ambrose street to Black.*

TO BE BROUGHT TO GRADE.

July	2, 1890,	*Slater avenue, from Irving to President.*
Dec.	4, "	*Knowles street, from Cypress to Pleasant.*
Jan.	15, 1891,	*Summit avenue, from Fourth street to Seventh.*
July	2, "	*Hall street, from Northup avenue to northerly termination.*

TO TAKE POSSESSION OF.

Oct.	31, 1889,	*King street, from Manton avenue to Sheridan street.*
"	15, 1891,	*Seymour street, from westerly termination to Ocean.*

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To be Paved.

No. of resolution.	Date of approval.	
469.	Aug. 4, 1891,	*Atwell's avenue, Manton avenue and King street.*

To be Curbed and Sidewalks Concreted.

439.	July 20, 1891,	*Chalkstone and Fruit Hill avenues, adjoining school-house lot.*

To be Put in Safe Condition.

Date of order.		
Sept.	17, 1891,	*River avenue, from Smith street to Chalkstone avenue.*

To be Paved with Granite Blocks.

No. of resolution.	Date of approval.	
529.	Sept. 9, 1891,	*Dorrance street, from Westminster to Friendship, and Weybosset street, from Dorrance to Orange.*
633.	" 30, "	*Olney street, from North Main to Prospect.*

Sidewalks to be Concreted.

536.	Sept. 9, 1891,	*Atwell's avenue, from Sear's avenue to Woonasquatucket river.*
562.	" 19, "	*Cooke street, from Power to Waterman.*
740.	Nov. 20, "	*Wesleyan avenue, from Broad street to Taylor.*

To Build Driveway and Concrete Sidewalks.

610.	Sept. 30, 1891,	*East avenue, corner Olney street, entrances to fire station.*

Roadway to be Repaired.

612.	Sept. 30, 1891,	*Union street, from Westminster to Washington.*

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To Replace Fence and Concrete Sidewalks.

No of resolution.	Date of approval.	
632.	Sept. 30, 1891,	*Greenwich street and Trinity square, adjoining Grace Church Cemetery.*

The following work was in progress December 31, 1891, viz.:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
April 17, 1890,	*Hyat street, from Amherst to Kossuth:*—curbing set.
May 21, 1891,	*Hanover street, from Dexter westerly to the present end of curbing:*—curbing set.
" " "	*Kinsley avenue, from Gaspee street to Eagle:*—curbing three-fourths set.

To be Built.

No. of resolution.	Date of approval.	
655.	Oct. 28, 1890,	*Kinsley avenue, from Gaspee street to Hemlock:*—two-thirds completed.
785.	Jan. 3, 1891,	*Kinsley avenue, from Hemlock street to Eagle:*—nearly completed.
410.	June 30, "	*Greenwich street from Bridgham to Lexington avenue:*—Sides of roadway to be turfed.

Land to be Filled.

185.	April 14, 1891,	*Edward S. Cheney, Adelaide avenue:*—in process.
186.	" " "	*Estate of Joseph J. Cooke, Adelaide avenue:*—in process.
187.	" " "	*William R. Randall, Adelaide avenue:*—in process.
188.	" " "	*Heirs of Adnah Sackett, Adelaide avenue:*—in process.
590.	Sept. 22, "	*Estate of Alfred Anthony, Adelaide avenue:*—in process.

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To be Brought to Grade.

No. of resolution.	Date of approval.	
722.	Nov. 10, 1891,	*Balch street, Pacific avenue, Hamburg avenue and Burrington street:*—nearly completed.
797.	Dec. 22, "	*Ernest street, from Eddy to Allen's avenue:*—in process.

The following work, ordered by the board of aldermen and city council, had not commenced December 31, 1891, namely:

Sidewalks to be Curbed and Gutters Paved.

Date of order.		
Nov.	20, 1890,	*Chalkstone avenue, from Mount Pleasant to Academy.*
Jan.	15, 1891,	*Ashburton street, from Charles to Tremont.*
Sept.	17, "	*Bowdoin street, from Appleton to Kossuth.*
"	" "	*Burnett street, from Bucklin to Dexter.*
"	" "	*Bucklin street, from Hawthorne to Carter.*
"	" "	*Irving avenue, from Butler to Grotto.*
Oct.	15 "	*Belmont avenue, from Claremont to Academy.*
"	" "	*Claremont avenue, from Roanoke street to Chalkstone avenue.*
"	" "	*Dexter avenue, from Broad street to Lockwood.*
"	" "	*Calder street, from Potter's avenue to land of N. Y. P. & B. R. R. Co.*
"	" "	*Charles street, from Branch avenue to Ledge street.*
"	" "	*Ambrose street, from Chalkstone avenue to Webster street.*
Nov.	19, "	*Baker street, from Broad to Eddy.*
"	" "	*Dart street, from McKenna to West River.*

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Date of order.		
Nov.	19, 1891,	*Waverly street, from Cranston to Dexter.*
Dec.	17, "	*Branch avenue, from Langdon street to Douglas avenue.*
"	" "	*Earl street, from Greenwich street to line of the N. Y. P. & B. R. R.*

To be Brought to Grade.

June	23, 1891,	*Elmwood avenue, from Roger Williams to the bridge over tracks of the N. Y. P. & B. R. R. Co.*

No. of resolution.	Date of approval.	
790.	Dec. 22, 1891,	*Charles, Admiral and Oriental streets.*

To be Paved with Granite Blocks.

530.	Sept. 9, 1891,	*Cranston street, from near Winter to 140 feet south of Waverly street.*
613.	" 30, "	*Broad street, from Dorrance to Chestnut.*
726.	Nov. 20, "	*Brook street, from Wickenden to Power.*
822.	Jan. 2, 1892,	*South Main street, from Crawford to Planet.*
823.	" " "	*Tockwotton street, from Ives to Gano.*

Remove Obstructions and Reset Curb.

Date of order.		
Oct.	15, 1891,	*South Main street, from Crawford to Planet.*

To Take Possession of and Remove Obstructions.

Nov.	5, 1891,	*Butler avenue, from Irving to the city line.*
Dec.	17, "	*Winslow place, from Broad street to High.*

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To Macadamize or Asphalt Roadway.

No. of resolution. Date of approval.

821. Jan. 2, 1892, *North Burial Ground, from entrance to North Main street.*

To Concrete Sidewalks.

824. Jan. 2, 1892, *Manning street, from Cooke to Hope.*

Bills approved on account of highways from October 1 to December 31, 1891, inclusive, amounted to:

Regular appropriation	$40,887 28	
Special appropriation	115,815 43	
		$156,702 71

Classified as follows:

Repairs on unpaved streets	$17,061 61	
Cleaning streets	11,534 38	
Repairs on paved streets	4,319 48	
Barn expenses	2,098 54	
Salaries—superintendent and clerks	672 75	
Tools, implements, etc	664 82	
Crushed stone—material and labor	573 99	
Steam rollers—repairs and supplies	329 75	
Sundries	328 17	
Blacksmith and wheelwright shop	239 14	
Repairs on stone crushers	190 67	
Screening gravel	110 53	
Horses, wagons, harnesses, etc	85 34	
Fencing streets—material and labor	69 75	
Stone—paving and crosswalk	32 55	
Office expenses, city yard	32 99	
Telephone lines	5 00	
		38,349 [illegible]

New Work—Building and Re-Building Streets, etc., Sidewalks Curbed and Gutters Paved.

Acorn street, from Kinsley avenue to Harris	$991 64	
Balaklava street, from Douglas avenue to Pekin street	1,147 20	
Chalkstone avenue, from River to Ruggles street	3,694 27	
Douglas avenue, from Admiral street to Branch avenue	16,968 81	
East Manning street, from Gano to Wayland	1,421 61	
Amounts carried forward	$24,223 53	38,349 [illegible]

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Amounts brought forward	$24,223 53	$38,349 46
Eighth street, from Highland avenue to Pawtucket	101 77	
Ford street, from end of curbing now set to Dexter	394 15	
Gaspee street, from Smith southerly to second angle in Gaspee	1,070 50	
Hanover street, from Dexter westerly to present end of curb	1,315 02	
Madison street, from Potter's avenue to near land of New York, Providence and Boston Railroad Co.	2,022 03	
Plenty street, from Broad to Greenwich	299 12	
River avenue, from Chalkstone to Valley street	2,660 44	
Stanford street, from Public to Willard avenue	1,499 03	
Western street, from Pleasant to Jenkins	264 67	
Young Orchard avenue, from Governor street to Ives	1,189 78	
		35,040 04
Pave with Granite Blocks.		
Atwell's and Manton avenues and King street	$6,554 03	
Broad street, from Dorrance to Chestnut	5,784 10	
Dorrance and Weybosset streets	11,220 93	
Olney street, from North Main to Prospect	3,188 44	
Tockwotton street, from East to Ives	1,275 86	
		28,023 36
To Be Built.		
Chapin avenue, from Messer street to Norfolk	$1,038 02	
Greenwich street, from Bridgham to Lexington avenue	28,289 46	
Kinsley avenue, from Gaspee street to Hemlock	8,639 58	
Kinsley avenue, from Hemlock street to Eagle	4,217 63	
		42,184 69
Rebuild and Pave.		
Smith, Charles and Back streets		2,431 65
Macadamize.		
Broadway, from Sabin street to Barton		2,280 93
To Be Brought to Grade.		
Balch street, Pacific avenue, Hamburg avenue and Burrington street	$1,470 17	
Hall street, from Northup avenue to northerly termination	1,276 08	
Knowles street, from Cypress to Pleasant	869 78	
Slater avenue, from Irving to President	329 81	
Summit avenue, from Fourth street to Seventh	129 99	
		4,075 83
Amount carried forward		$152,385 96

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Amount brought forward	$153,265 96
Repair Roadway.	
Union street, from Westminster to Washington	1,778 98
Build Driveway and Concrete Sidewalks.	
East avenue, corner of Olney street, entrance to fire station	778 26
To Put in Safe Condition.	
River avenue, from Smith street to Chalkstone avenue	1,712 79
Take Possession of and Remove Obstructions.	
Seymour street, from westerly termination to Ocean.	46 83
	$156,702 71

Bills deposited with the city treasurer from October 1 to December 31, 1891, inclusive, amounted to $4,155 23

As follows:

Union Railroad Co., granite blocks, etc	$2,362 12
New York and New England Railroad Co., granite blocks, etc	1,128 75
Labor and materials	336 36
Street sweepings	230 50
Manure from barn	57 50
Old road roller	25 00
Chopping blocks	13 50
Old shovels	1 50
	$4,155 23

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $4,726 59

As follows:

New York, Providence and Boston Railroad Co., materials used on Gaspee street	$3,065 89
Union Railroad Co., granite blocks, etc	1,086 17
Street sweepings	230 50
Labor on materials	228 53
Amount carried forward	$4,611 09

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Amount brought forward	$4,611 09
Manure from barn	57 50
Old road roller	25 00
Removing trees	18 00
Chopping blocks	13 50
Old shovels	1 50
	$4,726 59

SIDEWALKS AND CURBING.

The expenditures on account of sidewalks and curbing, from October 1 to December 31, 1891, inclusive, amounted to $13,261 04

Charged as follows:

Granite curbing	$12,422 09
Concreting sidewalks	812 95
Contract reservations	26 00
	$13,261 04

Curbing bills deposited with the city treasurer for collection, from October 1 to December 31, 1891, inclusive, amounted to $203 36

During the quarter, coupons from curbing bills collected have been returned by the city treasurer, and receipted for, amounting to . $1,373 72

CITY ENGINEER.

Bills approved on account of city engineer's department, from October 1 to December 31, 1891, inclusive, amounted to . . . $14,569 73

Charged as follows:

Salary—city engineer	$1,250 00
Salaries of assistants	11,640 42
Salaries of clerks	754 00
Supplies—drawing materials, etc	251 44
Horse car tickets, etc	240 30
City engineer—for horse hire	150 00
Instruments and repairs	133 65
Horse hire, barn expenses, etc	100 00
Sundries	49 92
	$14,569 73

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Bills deposited with the city treasurer for collection, from October 1 to December 31, 1891, inclusive, amounted to $16 13

As follows:

Map of water pipes in Johnston	$14 47
Tracing of Charles street	1 00
Blue process paper	66
	$16 13

During the quarter, coupons from bills collected by the city treasurer have been returned and receipted for amounting to 16 13

As follows:

Map of water pipes in Johnston	$14 47
Tracing of Charles street	1 00
Blue process paper	66
	$16 13

BRIDGES.

November 2d, the offer of Providence Architectural Iron and Metal Works to take down and replace railing of Point street bridge, was accepted. Amount, $350.00.

November 7th, the offer of E. D. Smith & Son to do concrete work for the Hawkins street bridge, was accepted.

Bills approved on account of bridges, from October 1 to December 31, 1891, inclusive, amounted to $10,643 62

Charged as follows:

Atwell's avenue bridge	$238 55
Barn expenses	54 48
Building at city yard	5 50
Cemetery street bridge	3 89
Central or Red bridge	713 35
Crawford street bridge	2 00
Eagle street bridge	1 19
Hawkins street bridge, to rebuild	2,563 51
Horses, wagons, harnesses, etc	7 50
Amount carried forward	$3,589 97

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Amount brought forward	$3,589 97
Lumber, hardware, etc	132 55
Point street bridge	3,461 31
Railroad Crossing street bridge	42 46
Rent of keeper's house, Washington bridge	30 00
Salaries—Point street bridge	985 50
Salaries—Washington bridge	489 70
Salaries—Red or Central bridge	476 00
Sundries	140 78
Tools	120 85
Valley street bridge, north span	351 52
Valley street bridge, south span	453 75
Washington bridge, over Providence river	1 80
Weybosset bridge	2 45
Whelden street bridge	20 45
Washington bridge, near India Point	344 53
	$10,643 62

Bills deposited with the city treasurer, from October 1 to December 31, 1891, inclusive, (for old lumber sold from various bridges), amounted to $39 64

During the quarter, coupons from bills collected have been returned by the city treasurer (for old lumber sold), and receipted for, amounting to $39 64

ROBERT E. SMITH,

Commissioner.

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THIRTY-SEVENTH QUARTERLY REPO

OF THE

DEPARTMENT OF PUBLIC

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING MARCH 31, 189

The Providence Press:
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37 Custom House Street.
1892.

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THIRTY-SEVENTH QUARTERLY REPORT

OF THE

DEPARTMENT OF PUBLIC WORKS

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING MARCH 31, 1892.

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REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., April 1, 1892.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the thirty-seventh quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and the cost of same for the quarter ending March 31, 1892.

WATER WORKS.

January 1st, the offer of H. R. Horton to furnish teams for the season of 1892 for the water and sewer departments was accepted.

January 6th, the proposal of Fuller Iron Works to furnish special castings, service boxes and castings for sewers required during 1892, was accepted, and a contract was subsequently executed.

March 5th, the "schedule of water rates" was amended so as to make the charge "for measured and estimated water" in excess of the minimum rate, as follows:

For all water annually consumed through a single tap up to $600 in value, per 100 gallons ..... .02
For all water annually consumed through a single tap, exceeding $600 in value, for the excess, per 100 gallons ..... .01½

The above to take effect January 1, 1892.

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The average daily consumption of water during the last quarter was 7,695,810 gallons.

Water pipes were laid during the quarter as follows:

6-INCH.

In Burnett, Mawney and Norfolk streets, Chapin, Ohio and Vermont avenues, and in Arnold and Wheeler avenues, Town of Cranston	4,584.11 feet.

or .87—miles.

Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.	feet.
30-inch	59,893.04	feet.
24-inch	43,418.92	feet.
20-inch	9,626.59	feet.
16-inch	31,922.58	feet.
12-inch	75,102.35	feet.
10-inch	14,652.26	feet.
8-inch	199,301.61	feet.
6-inch	845,473.90	feet.
Total	1,289,475.25	feet.

or 244.22—miles.

Four fire hydrants were set during the quarter, one at each of the following locations:

Burnett street, south side, 260 feet east of Dexter street.
Ohio avenue, north side, about 130 feet east of Virginia avenue.
Vermont avenue, north side, about 280 feet east of Eddy street.
Washington avenue, north side, at the northwest corner of Virginia avenue.

The total number of fire hydrants is now fourteen hundred and thirty-four; fourteen hundred and five flush and twenty-nine post hydrants.

The work of laying the following list of water pipes was in process at the close of the quarter:

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No. of resolution.	Date of approval.	
775.	Jan. 3, 1891,	*High street, Hartford road and Rocky Hill avenue, Johnston:—1,681.39 feet of 8-inch pipe laid in Hartford road, and 256.04 feet of 30-inch pipe in High street.*
577.	Sept. 19, "	*Cranston street, Cranston, from Elm street to Town Hall, in Knightsville.*

Work had not commenced upon laying water pipes in the following streets, March 31, 1892:

No. of resolution.	Date of approval.	
758.	Nov. 20, 1891,	*Canton street, from Chalkstone avenue to Linton street.*
80.	Feb. 2, 1892,	*Hamburg avenue, from Burrington street to Pacific avenue.*

During the quarter two hundred and forty-six water meters were set, of which number eight were to replace other meters. The use of eight meters was discontinued.

The following water meters were in use at the close of the quarter:

Kind.	Size.							Total.
	⅝-in.	¾-in.	1-in.	1¼-in.	2-in.	3-in.	4-in.	
Ball & Fitts, piston	3,047	598	149	39	5	.....	.....	3,838
Ball & Fitts, rotary	.....	.....	22	25	3	5	3	58
Crown	4,850	652	176	75	21	6	4	5,784
Fales, Jenks & Sons	1	1	1	.....	.....	.....	.....	3
Thomson	426	54	10	12	2	1	.....	505
Worthington	11	1	.....	.....	1	.....	1	14
	8,335	1,306	358	151	32	12	8	10,202

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Sixty-nine plumbers licenses were issued during the quarter, all of which expire December 31, 1892.

Five hundred and eighty-eight permits to do plumbing work were issued during the quarter.

Ninety-two applications for water were made during the quarter, making the total number March 31, 1892, seventeen thousand five hundred and eight.

The number of new service stops opened during the quarter was one hundred and seven.

The total number of service stops opened to March 31, 1892, inclusive, was sixteen thousand eight hundred and twenty-seven. The number in actual use March 31, 1892, was fifteen thousand seven hundred and sixty-one.

The amount of bills approved on account of water works, from January 1 to March 31, 1892, inclusive, was:

For construction and extension, . . $17,058 07

Classified as follows:

Cast iron water pipe	$7,994 43	
Stop valves	1,966 50	
Special castings	1,720 38	
Laying water pipe	1,425 85	
Service pipes	1,414 50	
Taps and stops	989 06	
Laying service pipe	579 71	
Barn expenses	258 34	
Fruit Hill reservoir, for construction	188 07	
Wharf salaries	175 50	
Labor on and carting pipe	166 32	
Fire hydrants, boxes and covers	115 60	
Horses, wagons, harnesses, etc	34 91	
Fruit Hill reservoir, for repairs	16 20	
Tools	12 70	
	$17,058 07	

For maintenance, ... $17,420 90

Classified as follows:

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Pettaconset Pumping Station.

Coal and wood	$1,842 77	
Firemen	699 80	
Sundries	634 03	
Engineers	627 25	
Superintendence	248 56	
Lights	234 00	
Corliss pumping engine and house	177 46	
Labor on fuel	132 30	
Care of grounds	111 03	
Oil, waste and packing	87 39	
Barn expenses	53 74	
Cornish engine house	34 17	
Real estate	24 26	
Cornish pumping engine	13 23	
		$4,919 99

Sockanosset Reservoir.

Watchman	$136 50	
Sundries	10 20	
		146 70

Hope Pumping Station.

Engineers	$575 25	
Firemen	465 60	
Lights	151 50	
Sundries	60 62	
Oil, waste and packing	46 01	
Care of grounds	42 50	
Coal and wood	10 94	
Hope pumping engine, No. 2	4 38	
		1,356 80

Hope Reservoir.

Watchman	$204 75	
Sundries	17 21	
		221 96

Pipe Line and Service Stops.

Repairs	$1,156 26	
Superintendence—salaries	650 00	
		1,806 26

Meter Department.

Water meters	$3,782 21	
Setting and repairing meters	1,152 23	4,934 44
Amount carried forward		$13,386 15

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Amount brought forward		$13,386 1

MISCELLANEOUS.

Clerks' and inspectors' salaries	$3,285 66	
Barn expenses	200 40	
Horses, wagons, harnesses, etc	186 78	
Prevention of defilement of the Pawtuxet	141 21	
Public drinking fountains and troughs	95 13	
Telephone lines	65 14	
Sundries	33 48	
Pipe yard, office expenses	21 85	
Analyses of water	5 10	
		4,034 7
		$17,420 9

The amount of expenditures from January 1 to March 31, 1892, inclusive, was . . . $34,478 9

The total expenditures to March 31, 1892, inclusive, were $7,440,593 9

The *net* expenditure for construction and extension from January 1 to March 31, 1892, inclusive, was	$16,548
The *net* expenditure for construction and extension to March 31, 1892, inclusive, was	$5,754,241
The *net* expenditure for maintenance from January 1 to March 31, 1892, inclusive, was	$11,505
The *net* expenditure for maintenance to March 31, 1892, inclusive, was	$1,054,765

Bills deposited with the city treasurer for collection, from January 1 to March 31, 1892, inclusive, amounted to $291,791 9

As follows:

Water	$284,965 69
Water meters	4,214 50
Setting and repairing meters	1,581 21
Rent of real estate	308 02
Penalties	188 00
Permanently closing service stops	50 00
Repairing service pipe in Delaine street sewer	3 50
Lot of old metal, rope, etc	288 11
Labor and materials, laying service pipes, etc	180 88
Manure from pipe yard barn	12 00
	$291,791 91

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During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . $288,484 86

As follows:

Water	$281,871 29	
Water meters	4,133 50	
Setting and repairing meters	1,418 31	
Rent of real estate	310 52	
Penalties	188 00	
Permanently closing service stops	50 00	
Repairing service pipe in Delaine street sewer	3 50	
Lot of old metal, rope, etc	288 11	
Labor and materials, laying service pipes, etc	209 63	
Manure from pipe yard barn	12 00	
		$288,484 86

SEWERS.

During the quarter ending March 31, 1892, sixty-nine permits were issued to drain layers; twenty-seven for new work and forty-two for extension and repair of drains.

Twenty-six drain-layer's licenses were issued during the quarter, all of which expire December 31, 1892.

January 6th, the proposal of H. R. Horton to furnish the cement required during the season of 1892, exclusive of that needed for the improved sewerage system, delivered on the work, was accepted and a contract was subsequently executed.

March 8th, the offer of Manchester & Hudson to furnish and deliver eight hundred thousand sewer brick for the improved sewerage system, was accepted. Amount $6,400.

March 11th, the offer of Frederick E. Shaw to deposit the waste earth from the sewer in Prairie avenue, Logan avenue and Ocean street, on the lots belonging to the city on Richardson street, was accepted.

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During the quarter assessments for the cost of constructing sewers were certified to the city treasurer as follows:

Grove and Knight streets and Atwell's avenue	$5,609 [illegible]
Whipple and Oregon streets	1,494 [illegible]
Joslin street and Manton avenue	3,969 [illegible]
Joslin street	1,6[illegible]
Manton avenue	4,163 [illegible]
Erastus street	1,[illegible]
Florence street	3,[illegible]
Julian street	4,154 27
Knowles street	1,9[illegible]
Gardner street	8[illegible] 43
Asia street	4[illegible]
Arthur avenue	1,0[illegible]
Atwell's avenue	3,[illegible]
Lily, Spruce and McAvoy streets	2,447 [illegible]
Dale street	[illegible] 21
Sutton street	1,3[illegible] 65
Harvard avenue	1,4[illegible] 24
Williams street	5[illegible]
East street, from present sewer to Arnold	1[illegible] 00
East street, from Arnold northerly	145 00
Courtland and Gesler streets	2,[illegible] 51
High street, Baker avenue and Broadway	2,4[illegible]
Woodland street	1,140 76
Brownell street	818 [illegible]
Knight street	8[illegible] 08
Broad street	1,027 [illegible]
Prospect street	749 97
Vinton street	2,363 [illegible]
Gesler street	1,070 [illegible]
Halsey street	5[illegible]
Clemence street	2[illegible]
Meader street	7[illegible]
Wilson street	577 [illegible]
Plenty street	1,776 [illegible]
Perkins street	1,5[illegible]
Eddy street	2[illegible] 34
Hospital street	4[illegible] 49
Dodge and Cranston streets	1,786 60
Cranston street	710 41
B street	1,741 12
Total	$63,8[illegible] 33

January 29th, a contract for the construction of the following sewer for the improved sewerage system was awarded and subsequently executed, namely:

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[The amounts given below are what are estimated will be paid the contractors for labor, and do not include cost of inspection and materials, (except cement), or rock excavation.]

To Frederick E. Shaw.

No. of resolution.	Date of approval.		
723.	Nov. 10, 1891,	*Gordon avenue, Prairie avenue, Logan avenue and Ocean street,* .	$46,903 60

February 4th, contracts for the construction of lateral sewers, which were subsequently executed, were awarded as follows, namely:

[The amounts given below are what are estimated will be paid the contractors for labor, and do not include cost of inspection and materials, or rock excavation.]

To Frederick E. Shaw.

No. of resolution.	Date of approval.		
666.	Oct. 16, 1891,	*Waverly street, from Cranston to Dexter,* .	$2,254 40
694.	Nov. 7, "	*Irving and Butler avenues,*	2,164 30
51.	Jan. 22, 1892,	*Branch avenue, North Main street, Livingston avenue and Whelden street,* . . .	7,188 90

To J. Frank Read & Co.

665.	Oct. 16, 1891,	*Chapin avenue, from summit to Cranston street,* . . .	621 45
667.	" " "	*Westfield street, from Harrison to Dexter,* .	510 05
742.	Nov. 20, "	*Hudson street, from summit to Parade,* .	489 00

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To John Keogh.

No. of resolution.	Date of approval.		
692.	Nov. 7, 1891,	*Cranston street, from Wendell to Potter's avenue.*	$4,994
693.	Nov. 7, 1891,	*Earl street, from Greenwich to Section 9, Improved Sewerage System,* . . .	1,199
695.	" " "	*Linwood avenue, from Cranston street to Dexter,* . . .	3,874
696.	" " "	*Potter's avenue, from Cranston street to Dexter,* . . .	4,940
767.	Dec. " "	*Carter street, from Greenwich to Bucklin,*	440
814.	Jan. 2, 1892,	*Hyat street, from Amherst to Manton avenue,*	1,090

To George R. Newman.

691.	Nov. 7, 1891,	*Butler avenue, from 100 feet north of Douglas street to Pitman,* .	1,411
741.	" 20, "	*Common street, from Jefferson to Mulberry,*	326
766.	Dec. 7, "	*C street, from Lester to Central,* . . .	825
791.	" 22, "	*Prairie avenue, from Public street to Colfax,*	4,110
813.	Jan. 2, 1892,	*Hammond street, from Gilbert to Cranston,* .	1,341
815.	" " "	*Sprague street, from Greenwich to Dexter,*	1,456

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During the quarter the construction of the following sewers was completed, namely:

No. of resolution.	Date of approval.		Date of completion.
		Disposal Division, Iron Pipe Outlet Sewer,	Mar. 9, 1892.
		Disposal Division, Section 1,	Mar. 17, 1892.
		Elmwood Division, Section 2,	Jan. 3, 1892.
		Elmwood Division, Section 7,	Jan. 4, 1892.
296.	May 21, 1891,	*Greenwich, Oakland and Public streets,*	Jan. 9, 1892.
416.	July 7, "	*Bowdoin, Appleton and Delaine streets,*	Jan. 22, 1892.

At the close of the quarter work upon the following sewers of the improved sewerage system was in progress, namely:

Elmwood Division, Section 6.
Elmwood Division, Section 8.
Elmwood Division, Section 9.

No. of resolution.	Date of approval.	
56.	Feb. 2, 1891,	*Hamilton, Irving and Melrose streets.*
654.	Oct. 6, "	*Delaine street, from Manton avenue to the river.*
723.	Nov. 10, "	*Gordon avenue, Prairie avenue, Logan avenue and Ocean street.*
113.	Mar. 11, 1892,	*Colfax street, from Gordon avenue to Prairie avenue.*

Work upon the following lateral sewers was in progress at the close of the quarter, namely:

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No. of resolution.	Date of approval.	
665.	Oct. 16, 1891,	*Chapin avenue, from summit to Cranston street.*
666.	" " "	*Waverly street, from Cranston to Dexter.*
691.	Nov. 7, "	*Butler avenue, from 100 feet north of Douglas street to Pitman.*
814.	Jan. 2, 1892,	*Hyat street, from Amherst to Manton avenue.*

Work upon the following sewers, completing the work ordered by the city council, had not commenced March 31, 1892, viz.:

No. of resolution.	Date of approval.	
595.	Sept. 22, 1891.	*Mawney street, from Greenwich to Dexter.*
619.	" 30, "	*Parade street, from Willow to Cranston.*
667.	Oct. 16, "	*Westfield street, from Harrison to Dexter.*
692.	Nov. 7, "	*Cranston street, from Wendell to Potter's avenue.*
693.	" " "	*Earl street, from Greenwich to Section 9, Improved Sewerage System.*
694.	" " "	*Irving and Butler avenues.*
695.	" " "	*Linwood avenue, from Cranston street to Dexter.*
696.	" " "	*Potter's avenue, from Cranston street to Dexter.*
741.	" 20 "	*Common street, from Jefferson to Mulberry.*
742.	" " "	*Hudson street, from summit to Parade.*
766.	Dec. 7, "	*C street, from Lester to Central.*
791.	" 22, "	*Prairie avenue, from Public street to Colfax.*

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No. of resolution.	Date of approval.	
813.	Jan. 2, 1892,	*Hammond street, from Gilbert to Cranston.*
815.	" " "	*Sprague street, from Greenwich to Dexter.*
51.	" 22, "	*Branch avenue, North Main street, Livingstone avenue and Whelden street.*
98.	Feb. 20, "	*Carter street, from Greenwich to near Bucklin street.*
112.	Mar. 11, "	*Bellevue avenue, from Dexter street to Cranston.*
114.	" " "	*Melrose street, from Congress avenue to Irving street.*
115.	" " "	*Messer street, from its summit to Cranston street.*

The amount of bills approved on account of sewers from January 1 to March 31, 1892, inclusive, was:

FOR CONSTRUCTION.

Regular appropriation	$28,691 35	
Improved sewerage appropriation	134,512 19	
		$163,203 54

Charged as follows:

Materials	$19,935 19
Rent of wharf and pipe yard	750 00
Testing cement	658 14
Sundries, improved sewerage system	621 89
Clerks' salaries	120 00
Sundries	52 25
Tools	70
Sewer in Bowdoin, Appleton and Delaine streets	1,757 89
Sewer in Butler avenue, from 100 feet north of Douglas street to Pitman	915 95
Sewer in Chapin avenue, from its summit to Cranston street	30 68
Sewer in Greenwich, Oakland and Public streets	1,713 25
Sewer in Hyat street, from Amherst to Manton avenue	1,482 60
Sewer in Waverly street, from Cranston to Dexter	1,194 78
Amount carried forward	$29,233 32

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Amount brought forward	$29,233 32
Sewer in Delaine street, from Manton avenue to the river	4,844 20
Sewer in Dexter street, from Cranston to Potter's avenue	2 50
Sewer in Disposal Division, Section 1	2,740 29
Sewer in Elmwood Division, Section 2	12,381 87
Sewer in Elmwood Division, Section 5	163 27
Sewer in Elmwood Division, Section 6	24,359 30
Sewer in Elmwood Division, Section 7	10,829 57
Sewer in Elmwood Division, Section 8	3,962 24
Sewer in Elmwood Division, Section 9	33,622 42
Sewer in Gordon avenue, etc., Elmwood Division	1,078 15
Sewer in Hamilton, Irving and Melrose streets	15,784 59
Iron pipe outlet sewer in Disposal Division, Section 1	11,740 08
Contract reservations	7,223 64
Grading Ernest street, from Eddy to Allen's avenue.	5,238 10
	$163,203 54

For maintenance, ... $5,860

Charged as follows:

Repairing basins and sewers	$1,706 18
Cleaning basins and sewers	1,679 01
Cleaning and repairing old drains	572 41
Inspection of connections	555 62
Horses, wagons, harnesses, etc	507 19
Barn expenses	354 43
Salary, superintendent	351 00
Filling cisterns, etc	35 77
Sundries	34 82
Tools	31 91
Cleaning private connections	29 80
Telephone lines	2 55
	$5,860 69

The *net* expenditure for construction of sewers to March 31, 1892, inclusive, was $3,090,55

The *net* expenditure for maintenance of sewers to March 31, 1892, inclusive, was $349,43

Bills deposited with the city treasurer for collection, from January 1 to March 31, 1892, inclusive, amounted to $349

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As follows:

Cleaning private connections	$59 25
Manure from barn	35 00
Pumping out cellars, etc	24 50
Sewer material	220 98
Testing cement	9 60
	$349 33

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $149 33

As follows:

Cleaning private connections	$59 25
Manure from barn	35 00
Pumping out cellars, etc	24 50
Sewer material	20 98
Testing cement	9 60
	$149 33

HIGHWAYS.

Three permits to open streets were issued during the quarter.

March 11th, the offer of Michael Sweeney to regrade, and furnish and lay sod between the driveway and railroad tracks on Greenwich street, was accepted.

March 22d, the proposal of Frank Slavin to cover gutter pavement with concrete and asphaltic top dressing, was accepted.

Statements have been prepared of the cost of curbstones set, ascertained by the commissioner and certified to the board of aldermen for approval, as follows:

Acorn street, from Kinsley avenue to Harris	$1,145 02
Bocklin street, from Carter to Earl	1,050 36
Eighth street, from Highland avenue to Pawtucket	804 20
Amount carried forward	$2,999 58

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Amount brought forward	$2,999 58
Gallup street, from Prairie avenue to Ocean street	1,093 06
LaVaughan street, from Atwell's avenue to Amherst street	788 89
Plenty street, from Broad to Greenwich	1,422 03
Redwing street, from Greenwich to Bucklin	460 44
Salisbury street, from Plain to Ocean	745 92
Staniford street, from Public to Willard avenue	1,062 96
Sullivan street, from Greenwich to Hamilton	1,162 35
Swan street, from Ocean to Plain	895 81
Williams street, from Ives to Gano	852 83
Atwell's avenue, from Hannah street to Manton avenue	2,030 34
East Manning street, from Gano to Wayland	731 14
Gaspee street, from Smith street southerly to second angle in Gaspee street	1,194 91
Oxford street, from Harriet to Broad	1,814 18
Pemberton street, from Hendrick to Dover	1,062 02
River avenue, from Chalkstone to Valley street	2,665 15
Young avenue, from Smith street to Chalkstone avenue	513 08
Young Orchard avenue (now Preston street), from Governor street to Ives	641 42
Balaklava street, from Douglas avenue to Pekin street	502 83
Chalkstone avenue, from Manton bridge to Fruit Hill avenue	721 98
Chalkstone avenue, from Ambrose street to Black	425 66
Chalkstone avenue, from River to Ruggles street	4,345 91
Chalkstone avenue, from Smith street to Ruggles	805 44
Chapin avenue, from Messer street to Norfolk	1,826 06
Ford street, from end of curbing set to Dexter street	1,025 22
Hanover street, from Dexter westerly to the present end of curbing	946 30
Hyat street, from Amherst to Kossuth	424 05
Jessamine street, from Cranston to Salem	2,066 44
Kinsley avenue, from Gaspee street to Eagle (part of the work ordered)	3,494 90
Madison street, from Potter's avenue to land of New York, Providence and Boston Railroad Co., on the east side, and on the west side to within about 190 feet of land of New York, Providence and Boston Railroad Co.	896 47
Peace street, from Broad to Greenwich	1,782 45
Plain street, from Potter's avenue to Pavilion	4,241 39
Western street, from Pleasant to Jenkins	476 06
Zone street, from Chalkstone avenue to Orms street	923 38
Burnett street, from Bucklin to Dexter	986 38
Douglas avenue, from Admiral street to Branch avenue	6,506 92
John street, from Thayer to Brook	383 12
Pettis street, from North Main to Moshassuck river	458 19
Total	$55,375 26

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During the quarter the following work was completed:

To be Brought to Grade.

No. of resolution.	Date of approval.	
722.	Nov. 10, 1891,	*Balch street, Pacific avenue, Hamburg avenue and Burrington street.*

The following work was in progress March 31, 1892, viz.:

Sidewalks to be Curbed and Gutters Paved.

Date of order.		
April 17, 1890,		*Hyat street, from Amherst to Kossuth:*—curbing set.
Jan. 15, 1891,		*Ashburton street, from Charles to Tremont:*—in process.
May 21,	"	*Hanover street, from Dexter westerly to the present end of curbing:*—nearly completed.
" "	"	*Kinsley avenue, from Gaspee street to Eagle:*—curbing three-fourths set.
Sept. 17,	"	*Bowdoin street, from Appleton to Kossuth:*—in process.
" "	"	*Burnett street, from Bucklin to Dexter:*—nearly completed.
" "	"	*Bucklin street, from Hawthorne to Carter:*—in process.
Nov. 19,	"	*Baker street, from Broad to Eddy:*—in process.

To be Built.

No. of resolution.	Date of approval.	
655.	Oct. 28, 1890,	*Kinsley avenue, from Gaspee street to Hemlock:*—two-thirds completed.
785.	Jan. 3, 1891,	*Kinsley avenue, from Hemlock street to Eagle:*—nearly completed.

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No. of resolution.	Date of approval.	
410.	June 30, 1891,	*Greenwich street, from Bridgham to Lexington avenue:*—sides of roadway to be turfed.

LAND TO BE FILLED.

185.	April 14, 1891,	*Edward S. Cheney, Adelaide avenue:*—in process.
186.	" " "	*Estate of Joseph J. Cooke, Adelaide avenue:*—in process.
187.	" " "	*William R. Randall, Adelaide avenue:*—in process.
188.	" " "	*Heirs of Adnah Sackett, Adelaide avenue:*—in process.
590.	Sept. 22, "	*Estate of Alfred Anthony, Adelaide avenue:*—in process.

TO BE BROUGHT TO GRADE.

797.	Dec. 22, 1891,	*Ernest street, from Eddy to Allen avenue:*—in process.

The following work, ordered by the board of aldermen and city council, had not commenced March 31, 1892, namely:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
Nov. 20, 1890,	*Chalkstone avenue, from Mount Pleasant to Academy.*
Sept. 17, 1891,	*Irving avenue, from Butler to Grotto.*
Oct. 15, "	*Belmont avenue, from Claremont to Academy.*
" " "	*Claremont avenue, from Roanoke street to Chalkstone avenue.*

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:e of order.

15, 1891, *Dexter avenue, from Broad street to Lockwood.*

" " *Calder street, from Potter's avenue to land of N. Y. P. & B. R. R. Co.*

" " *Charles street, from Branch avenue to Ledge street.*

" " *Ambrose street, from Chalkstone avenue to Webster street.*

19, " *Dart street, from McKenna to West River.*

" " *Waverly street, from Cranston to Dexter.*

17, " *Branch avenue, from Langdon street to Douglas avenue.*

" " *Earl street, from Greenwich street to line of the N. Y. P. & B. R. R.*

18, 1892, *Sheldon street, from Benefit to Brook.*

" " *Ellery street, from Willow to Chapin avenue.*

" " *Harriet street, from Potter's avenue to Sayles street.*

" " *Hudson street, from Messer to Ellery.*

TO BE BROUGHT TO GRADE.

23, 1891, *Elmwood avenue, from Roger Williams to the bridge over tracks of the N. Y. P. & B. R. R. Co.*

:solution. Date of approval.

Dec. 22, 1891, *Charles, Admiral and Oriental streets.*

TO BE PAVED WITH GRANITE BLOCKS.

Sept. 9, 1891, *Cranston street, from near Winter to 140 feet south of Waverly street.*

" 30, " *Broad street, from Dorrance to Chestnut.*

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No. of resolution.	Date of approval.	
726.	Nov. 20, 1891,	*Brook street, from Wickenden Power.*
822.	Jan. 2, 1892,	*South Main street, from Crawf to Planet.*
823.	" " "	*Tockwotton street, from Ives Gano.*

Remove Obstructions and Reset Curb.

Date of order.		
Oct.	15, 1891,	*South Main street, from Crawford Planet.*

To Take Possession of and Remove Obstructions

Nov.	5, 1891,	*Butler avenue, from Irving to the city li*
Dec.	17, "	*Winslow place, from Broad street to Hi*

To Macadamize or Asphalt Roadway.

No. of resolution.	Date of approval.	
821.	Jan. 2, 1892,	*North Burial Ground, from trance to North Main street.*

To Concrete Sidewalks.

824.	Jan. 2, 1892,	*Manning street, from Cooke to H*
62.	" 26, "	*Greenwich and Burnett streets, joining estate of Elmwood Club.*
127.	Mar. 22, "	*Eddy street, east side, from the city line to Thurber's avenue.*

To Concrete Gutters.

128.	Mar. 22, 1892,	*Burnett street, from Greenwic Bucklin.*

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Bills approved on account of highways from January 1 to March 31, 1892, inclusive, amounted to:

Regular appropriation	$27,335 70	
Special appropriation	36,610 07	
		$63,945 77

Classified as follows:

Screening gravel	$7,881 16	
Crushed stone—material and labor	5,472 53	
Cleaning streets	3,656 74	
Removing snow and ice	1,959 37	
Stone—paving and crosswalk	1,905 90	
Barn expenses	1,691 37	
Repairs on unpaved streets	1,173 27	
Tools, implements, etc	686 30	
Salaries—superintendent and clerks	672 75	
Contract reservations	611 00	
Horses, wagons, harnesses, etc	564 65	
Blacksmith and wheelwright shop	378 01	
Repairs on paved streets	355 09	
Steam rollers, repairs and supplies	177 44	
Repairs on stone crushers	136 67	
Fencing streets—material and labor	50 00	
Sundries	40 67	
Office expenses, city yard	31 25	
		$27,444 17

NEW WORK.—BUILDING AND REBUILDING STREETS, ETC., SIDEWALKS CURBED AND GUTTERS PAVED.

Baker street, from Broad to Eddy	$299 21	
Belmont avenue, from Claremont to Academy	300 00	
Bucklin street, from Hawthorne to Carter	447 78	
Burnett street, from Bucklin to Dexter	1,197 45	
Calder street, from Potter's avenue to land of New York, Providence and Boston Railroad Co	641 73	
Chalkstone avenue, from Mt. Pleasant to Academy	386 31	
Claremont avenue, from Roanoke street to Chalkstone avenue	175 00	
Dart street, from McKenna to West River	328 25	
Earl street, from Greenwich to line of New York, Providence and Boston Railroad Co	568 21	
Hanover street, from Dexter westerly to present end of curb	696 59	
		5,040 53
Amount carried forward		$32,484 70

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Amount brought forward		$32,4

PAVE WITH GRANITE BLOCKS.

Broad street, from Dorrance to Chestnut	$4,903 12	
Brook street, from Wickenden to Power	106 68	
Cranston street, from 30 feet south of Winter to 140 feet south of Waverly	16,436 62	
Dorrance and Weybosset streets	98 73	
South Main street, from Crawford to Planet	490 85	
Tockwotton street, from Ives to Gano	166 60	
		22,20

TO BE BUILT.

Greenwich street, from Bridgham to Lexington avenue	$3,753 91	
Kinsley avenue, from Gaspee street to Hemlock	383 98	
Kinsley avenue, from Hemlock street to Eagle	1,625 85	
		5,76

TO BE BROUGHT TO GRADE.

Balch street, Pacific avenue, Hamburg avenue and Burrington street	$2,336 72	
Charles, Admiral and Oriental streets	786 48	
		3,1

TO PUT IN SAFE CONDITION.

River avenue, from Smith street to Chalkstone avenue		1

LANDS TO BE FILLED.

Land of *Heirs of Adnah Sackett et al.*, on Adelaide avenue		2
		$63,9

Bills deposited with the city treasurer for collection from January 1 to March 31, 1892, inclusive, amounted to $979

As follows:

Labor and materials	$468 05
Old iron and rope	271 66
Street sweepings	171 00
Manure from barn	58 75
Removing trees	10 00
	$979 46

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During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $3,150 05

As follows:

Union Railroad Co., granite blocks, etc.	$1,260 20
New York and New England Railroad Co., granite blocks, etc.	1,128 75
Old iron and rope	271 66
Labor and materials	239 69
Street sweepings	166 09
Manure from barn	58 75
Removing trees	25 00
	$3,150 05

SIDEWALKS AND CURBING.

The expenditures on account of sidewalks and curbing from January 1 to March 31, 1892, inclusive, amounted to $11,906 27

Charged as follows:

Granite curbing	$7,091 19
Contract reservations	4,798 00
Concreting sidewalks	17 08
	$11,906 27

Curbing bills deposited with the city treasurer from January 1 to March 31, 1892, inclusive, amounted to $55,759 52

During the quarter coupons from curbing bills collected have been returned by the city treasurer and receipted for, amounting to . $10,516 60

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CITY ENGINEER.

Bills approved on account of city engineer's department from January 1 to March 31, 1892, inclusive, amounted to . . . $14,108 7

Charged as follows:

Salary—city engineer	$1,250 00
Salaries of assistants	11,636 50
Salaries of clerks	756 25
Horse car tickets, etc	220 00
Supplies—drawing materials, etc	162 72
Meteorological instruments and repairs	41 12
Sundries	30 63
Instruments and repairs	11 50
	$14,108 72

Bills deposited with the city treasurer for collection from January 1 to March 31, 1892, inclusive, amounted to . . . . . $39 (

As follows:

Tracing of Providence streets	$24 80
Supplies, etc	6 88
Steel tapes	4 00
Set of sewer diagrams	4 00
	$39 68

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $39 (

As follows:

Tracing of Providence streets	$24 80
Supplies, etc	6 88
Steel tapes	4 00
Set of sewer diagrams	4 00
	$39 68

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BRIDGES.

January 1st, the offer of Fuller Iron Works to furnish and put in place three iron bands for pier cylinders of the Washington bridge, near India Point, was accepted. Amount, $105.

Bills approved on account of bridges from January 1 to March 31, 1892, inclusive, amounted to $3,064 35

Charged as follows:

Atwell's avenue bridge	$39 84
Barn expenses	31 80
Branch avenue bridge	2 71
Building at city yard	11 75
Cemetery street bridge	2 90
Central or Red bridge	27 68
Eagle street bridge	1 45
Exchange bridge	2 10
Gaspee street bridge	14 24
Horses, wagons, harnesses, etc	4 25
Lumber, hardware, etc	14 34
Manton bridge	24 17
Mill street bridge	10 77
Nash Lane bridge	45 93
Park street bridge	9 87
Point street bridge	179 24
Rent of keeper's house, Washington bridge	30 00
Salaries—Point street bridge	992 25
Salaries—Red or Central bridge	465 50
Salaries—Washington bridge,	486 02
Smith street bridge	2 69
Stevens street bridge	8 40
Sundries	196 99
Tar bridge, Manton avenue	2 49
Telephone lines	4 35
Tools	198 34
Valley street bridge, north span	2 18
Veazie street bridge	3 63
Wanskuck bridge	5 06
Washington bridge, over Providence river	43 15
Washington bridge, near India Point	162 16
Weybosset bridge	38 10
	$3,064 35

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Bills deposited with the city treasurer for collection from January 1 to March 31, 1892, inclusive, (for lot of old metal, rope, rubber, etc.,), amounted to	$44 89
During the quarter coupons from bills collected (for lot of old metal, rope, rubber, etc., sold), have been returned by the city treasurer and receipted for, amounting to . . .	$44 89

ROBERT E. SMITH,

Commissioner.

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THIRTY-EIGHTH QUARTERLY REPO

OF THE

DEPARTMENT OF PUBLIC

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING JUNE 30, 189

The Providence Press:
Snow & Farnham, City Printers,
27 Congress House Street.
1892.

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THIRTY-EIGHTH QUARTERLY REPORT

OF THE

DEPARTMENT OF PUBLIC WORKS

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING JUNE 30, 1892.

The Providence Press:
SNOW & FARNHAM, CITY PRINTERS,
37 Custom House Street.
1892.

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REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., July 1, 1892.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the thirty-eighth quarterly report of the expenditures by the several departmehts under his direction and control, with statements of work ordered and the condition and the cost of same for the quarter ending June 30, 1892.

WATER WORKS.

April 12th, the offer of Chapman Valve Manufacturing Company to furnish and deliver twelve 6-inch post hydrants was accepted. Amount, $728.28.

April 25th, the offer of E. F. Evans to shingle the "Hamilton" house at Pettaconset and the keeper's house at Sockanosset was accepted. Amount, $325.00.

May 3d, the offer of D. W. McCoid to mow the grass on the embankments and grounds of Hope Reservoir for the season of 1892 was accepted.

May 20th, the offer of Chapman Valve Manufacturing Company to furnish and deliver six 6-inch post hydrants was accepted. Amount, $364.14.

May 27th, the offer of John R. White & Son to furnish and deliver four hundred tons coal for Hope Pumping Station was accepted.

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May 27th, the offer of R. B. Little & Co., to furni deliver about two thousand gross tons pea coal for Pet set Pumping Station was accepted.

June 21st, the offer of R. D. Wood & Co., of Ph phia, to extend contract dated December 15, 1891, amount of two hundred and fifty tons of 16-inch and cast iron water pipes, was accepted.

The average daily consumption of water during th quarter was 7,461,000 gallons.

Water pipes were laid during the quarter as follows

12-INCH.

In Charles and Silver Spring streets	42

8-INCH.

In Hemlock, Niagara, Oriental, Promenade and Silver Spring streets and Union avenue, in Union avenue, Town of Johnston, and in Cranston and Pontiac streets, Allen's and Norwood avenues, Town of Cranston	6,44

6-INCH.

In Ambrose, Balch, Canton, Colfax, Commodore, Curtis, David, Dean, Dexter, East Manning, Ellery, Evergreen, Kane, Lancaster, Lisbon, Miller, Mitchell, Pelham, Redwing, Sorrento, Wadsworth, Waverly, Wayne and Willow streets, Claremont, East Elmwood, Hamburg, Indiana, Irving, Jefferson, Linwood, Narragansett, Oriole, Princeton, Reservoir and Virginia avenues; in Brook and Laban streets, Rocky Hill and Union avenues, Town of Johnston; in Brook, Greenwood, Laurens, Pontiac and Richards streets, Albert, Arnold, Columbia, Frances, Narragansett, New Depot and Norwood avenues, Town of Cranston	19,95
Total	26,82

or 5.08 + miles.

Water pipes were removed during the quarter as fol

6-INCH.

In Bendemeer and Evans streets, East Elmwood, Linwood and Reservoir avenues	50

or .095— miles.

Statement of sizes and lengths of pipe laid since th mencement of the work:

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36-inch	10.084.00 feet.
30-inch	59,893.04 feet.
24-inch	43,418.92 feet.
20-inch	9,626.59 feet.
16-inch	31,922.58 feet.
12-inch	75,523.55 feet.
10-inch	14,652.26 feet.
8-inch	205,749.36 feet.
6-inch	864,930.76 feet.
Total	1,315,803.06 feet.

or 249.205 + miles.

Fourteen fire hydrants have been set during the quarter, one in each of the following locations:

Charles street, east side, at the southeast corner of Silver Spring street.
Cranston street, Cranston, south side, opposite west line of Church street.
Cranston street, Cranston, east side, opposite south line of Batcheller street.
Cranston street, Cranston, east side, opposite north line of Randall street.
Cranston street, Cranston, east side, 24 feet south of south line of Phenix road.
Curtis street, northeast side, about 160 feet southeast of Bosworth street.
Day street, north side, about 260 feet east of Fenner avenue.
East avenue, east side, at the southerly corner of Uncas street.
Hamburg avenue, east side, opposite junction of Pacific avenue.
Lancaster street, north side, about 400 feet west of Camp street.
Lisbon street, northeast side, about 190 feet southeast of Chalkstone avenue.
Pontiac street, Cranston, east side, opposite old Budlong house.
Promenade street, north side, about 840 feet west of Holden street.
Wayne street, south side, about 380 feet east of Candace street.

During the quarter one fire hydrant was removed from the following location:

Charles street, west side, opposite south line of Cross street.

The total number of fire hydrants is now fourteen hundred and forty-seven; fourteen hundred and thirteen flush and thirty-four post hydrants.

Work had not commenced upon laying water pipes in the following street, June 30, 1892:

No. of resolution.	Date of approval.	
314.	May 21, 1892,	*North street, Johnston, from end of pipe to Mill street.*

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During the quarter two hundred and one water meters were set, of which number six were to replace other meters. The use of eight meters was discontinued.

The following water meters were in use at the close of the quarter:

Kind.	Size.							Total.
	⅝-in.	¾-in.	1-in.	1½-in.	2-in.	3-in.	4-in.	
Ball & Fitts, piston	3,065	601	148	38	5	.....	.....	3,857
Ball & Fitts, rotary	.....	.....	22	25	3	5	3	58
Crown	4,923	653	176	75	22	8	6	5,863
Fales, Jenks & Sons	1	1	1	.....	.....	.....	.....	3
Thomson	499	67	13	13	2	1	.....	595
Worthington	10	1	.....	.....	1	.....	1	13
	8,498	1,323	360	151	33	14	10	10,389

Twelve plumbers' licenses were issued during the quarter, making the total number eighty-one, all of which expire December 31, 1892.

Nine hundred and eighty-five permits to do plumbing work were issued during the quarter.

Three hundred and thirty-one applications for water were made during the quarter, making the total number June 30, 1892, seventeen thousand eight hundred and thirty-nine.

The number of new service stops opened during the quarter was two hundred and sixty-two.

The total number of service stops opened to June 30, 1892, inclusive, was seventeen thousand and eighty-nine. The number in actual use June 30, 1892, was sixteen thousand and eighty-four.

The amount of bills approved on account of water works, from April 1 to June 30, 1892, inclusive, was:

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For construction and extension, . . $49,875 32

Classified as follows:

Cast iron water pipe	$22,682 10	
Fire hydrants, boxes and covers	12,647 01	
Laying water pipe	8,474 20	
Special castings	1,730 72	
Laying service pipe	1,256 36	
Rent of wharf and pipe yard	750 00	
Labor on and carting pipe	709 41	
Taps and stops	594 75	
Horses, wagons, harnesses, etc.	283 88	
Fruit Hill reservoir, for construction	249 11	
Wharf salaries	175 50	
Barn expenses	171 44	
Tools	146 63	
Sundries	3 56	
Stop valves	65	
	$49,875 32	

For maintenance, ... $21,851 67

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$2,719 09	
Firemen	733 80	
Sundries	617 96	
Engineers	479 11	
Cornish engine house	472 38	
Real estate	444 26	
Superintendence	260 20	
Care of grounds	196 70	
Lights	163 75	
Oil, waste and packing	114 18	
Labor on fuel	73 35	
Barn expenses	41 41	
Corliss pumping engine and house	39 42	
Cornish pumping engine	3 00	
Worthington pumping engine	30	
		$6,358 91

SOCKANOSSET RESERVOIR.

Sundries	$487 19	
Watchman	136 50	
		623 69

HOPE PUMPING STATION.

Coal and wood	$2,397 42	
Engineers	575 25	
Amounts carried forward	$2,972 67	$6,982 60

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Amounts brought forward	$2,972 67	[illegible]
Firemen	436 60	
Care of grounds	198 00	
Lights	97 00	
Sundries	52 14	
Oil, waste and packing	9 79	
Hope pumping engine, No. 2	1 08	
		3,[illegible]

HOPE RESERVOIR.

Sundries	$282 75	
Watchman	204 75	
		[illegible]

PIPE LINE AND SERVICE STOPS.

Repairs	$1,615 30	
Superintendence—salaries	650 10	
		2,[illegible]

METER DEPARTMENT.

Water meters	$3,331 93	
Setting and repairing meters	1,034 55	
		4,[illegible]

MISCELLANEOUS.

Clerks' and inspectors' salaries	$2,821 87	
Prevention of defilement of the Pawtuxet	356 18	
Telephone lines	231 77	
Barn expenses	206 94	
Analyses of water	200 30	
Sundries	70 10	
Horses, wagons, harnesses, etc	47 55	
Public drinking fountains and troughs	24 45	
Real estate at Pawtuxet	17 50	
Pipe yard, office expenses	5 75	
		3,[illegible]
		$21,[illegible]

The amount of expenditures from April 1 to June 30, 1892, inclusive, was . . . $71,726 [illegible]

The total expenditures to June 30, 1892, inclusive, were . . . . . $7,512,320 [illegible]

The *net* expenditure for construction and extension from April 1 to June 30, 1892, inclusive, was $49,191

The *net* expenditure for construction and extension to June 30, 1892, inclusive, was $5,803,433

The *net* expenditure for maintenance from April 1 to June 30, 1892, inclusive, was ..... $15,49[illegible]

The *net* expenditure for maintenance to June 30, 1892, inclusive, was $1,070,251

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Bills deposited with the city treasurer for collection, from April 1 to June 30, 1892, inclusive, amounted to $46,905 09

As follows:

Water	$39,708 70	
Water meters	4,929 50	
Setting and repairing meters	1,114 85	
Rent of real estate	234 52	
Repairing pipe line	49 98	
Boiler for drinking trough	45 00	
Permanently closing service stops	35 00	
Rebate from Providence Telephone Company	33 75	
Penalties	28 00	
Old lawn mowers	2 50	
Old buggy	2 00	
Labor and materials, laying service pipes, etc	507 99	
Cast iron water pipes to Builders' Iron Foundry	163 30	
Removing rock for Town of Johnston	50 00	
	$46,905 09	

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . $48,417 27

As follows:

Water	$41,340 48	
Water meters	4,739 50	
Setting and repairing meters	1,206 15	
Rent of real estate	265 61	
Boiler for drinking trough	45 00	
Repairing pipe line	40 73	
Rebate from Providence Telephone Company	33 75	
Permanently closing service stops	30 00	
Penalties	28 00	
Old lawn mowers	2 50	
Old buggy	2 00	
Labor and materials, laying service pipes, etc	470 25	
Cast iron water pipes to Builders' Iron Foundry	163 30	
Removing rock for Town of Johnston	50 00	
		$48,417 27

SEWERS.

During the quarter ending June 30, 1892, three hundred and twenty-two permits were issued to drain layers; two hund-

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red and seventy-two for new work, and fifty for extension and repair of drains.

Eight drain-layer's licenses were issued during the quarter, making the total number thirty-four, all of which expire December 31, 1892.

May 12th, the offer of Peter Lalime to move the sewer maintenance barn and carriage-house from Kinsley avenue was accepted.

May 25th, the offer of Manchester & Hudson to furnish and deliver on wharf in this city two million bricks for the lateral sewers was accepted and a contract subsequently executed. Amount $14,750.00.

May 25th, the offer of New England Steam Brick Company to furnish and deliver on board cars at India street one million bricks for the improved sewerage system, was accepted and a contract subsequently executed. Amount, $7,750.00.

During the quarter assessments for the cost of constructing sewers were certified to the city treasurer as follows:

Congdon street	$1,034 11
Smith street	73 72
Smith, Davis and Jefferson streets	7,387 50
Jefferson street	1,058 31
Delaine street	2,560 53
Bowdoin and Appleton streets	2,787 25
Hyat street	1,696 52
Humboldt and Wayland avenues and to the river	7,569 06
Irving avenue	993 73
Butler avenue	2,754 94
Ernest street	6,888 19
Crocker avenue	2,451 51
Hamilton, Irving and Melrose streets	8,024 62
Common street	340 00
Total	$45,619 99

April 29th, contracts for the construction of lateral sewers, which were subsequently executed, were awarded as follows, namely:

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[The amounts given below are what are estimated will be paid the contractors for labor, and do not include cost of inspection and materials, or rock excavation.]

To George R. Newman.

No. of resolution.	Date of approval.		
115.	Mar. 11, 1892,	*Messer street, from its summit to Cranston street,* . .	$631 30

To Frederick E. Shaw.

189.	April 19, 1892,	*Public street, from Broad to Hamilton,* .	1,961 50

To J. Frank Read & Co.

191.	April 19, 1892,	*Wood street, from its summit to Parade street,* . . .	474 35
231.	" 22, "	*Exchange street, from Exchange Place to Westminster street,* .	626 72

To Everson and Liddle.

112.	Mar. 11, 1892,	*Bellevue avenue, from Dexter street to Cranston,*	1,841 40
114.	" " "	*Melrose street, from Congress avenue to Irving street,* . .	2,272 80
165.	April 12, "	*Chalkstone avenue, from Harold street to Claremont avenue,* .	6,424 60
166.	" " "	*Academy avenue, Roanoke street and Belmont avenue,* .	4,340 20
167.	" " "	*Regent avenue, Academy avenue and Dover street,* . . .	5,779 00

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No. of resolution.	Date of approval.		
168.	April 12, 1892,	*Harold street, from Valley to Chalkstone avenue,* . . .	$6,42
190.	" 19, "	*Steuben street, from Atwell's avenue to Manton,*	1,06

April 29th, a contract for the construction of the fol ing sewer for the improved sewerage system was aw and subsequently executed, namely:

To James J. Newman.

No. of resolution.	Date of approval.		
169.	April 12, 1892,	*Eagle and Valley streets,* . . .	$10,2

June 8th, contracts for the construction of the follc lateral sewers, which were subsequently executed awarded as follows, namely:

To George R. Newman.

No. of resolution.	Date of approval.		
263.	May 9, 1892,	*Congress avenue, from Broad street to Hamilton,* . . .	$1,3
264.	" " "	*Harrison street, from High to Cranston,* .	1,6
287.	" 11, "	*Colfax and Ocean streets,* . . .	3,2
288.	" " "	*Spruce street and Brayton avenue,* .	1,7
320.	June 8, "	*Kossuth street, from Putnam to Bowdoin,*	3

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To Frederick E. Shaw.

No. of resolution.	Date of approval.		
313.	May 21, 1892,	*Pennsylvania avenue, from Broad street to Prairie avenue,* .	$642 90
319.	June 8, "	*Bucklin street, from Carter to Earl,* .	1,020 05

To James J. Newman.

265.	May 9, 1892,	*Manton avenue, from near Florence street to the Woonasquatucket river,* . . .	6,171 50

To John Keogh.

277.	May 10, 1892,	*Amherst street, Putnam street, Atwell's avenue and Covell street,* . . .	5,955 45

To J. Frank Read & Co.

289.	May 11, 1892,	*Butler avenue, east side, from President avenue to near Irving,*	1,360 79

June 8th, a contract for the construction of the following sewer for the improved sewerage system was awarded and subsequently executed, namely:

To Everson & Liddle.

No. resolution.	Date of approval.		
276.	May 10, 1892,	*Delaine and Valley streets,* . . .	$75,372 50

June 10th, a contract for the construction of the following lateral sewer was awarded and subsequently executed, namely:

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To Frederick E. Shaw.

No. of resolution.	Date of approval.		
312.	May 21, 1892,	*High street, from the city line to the sewer in Valley street,* . .	$3,06

During the quarter the construction of the following ers was completed, namely:

No. of resolution.	Date of approval.		Date of com
		Elmwood Division, Section 6, .	April 29, 1
		Elmwood Division, Section 8, .	May 28, 1
		Elmwood Division, Section 9, .	June 18, 1
56.	Feb. 2, 1891,	Hamilton, Irving and Melrose streets, . .	May 19, 1
595.	Sept. 22, 1891,	Mawney street, from Greenwich to Dexter, . .	May 27, 1
619.	" 30, "	Parade street, from Willow to Cranston, . . .	April 25,
654.	Oct. 6, "	Delaine street, from Manton avenue to the river,	April 4,
665.	" 16, "	Chapin avenue, from summit to Cranston street,	April 6,
666.	" " "	Waverly street, from Cranston to Dexter, . .	April 8,
667.	" " "	Westfield street, from Harrison to Dexter, . .	April 15,

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ion. Date of approval.		Date of completion.
Nov. 7, 1891,	Butler avenue, from 100 feet north of Douglas street to Pitman,	April 7, 1892.
" " "	Cranston street, from Wendell to Potter's avenue,	April 27, 1892.
" " "	Earl street, from Greenwich to Section 9, Improved Sewerage System,	May 7, 1892.
" " "	Irving and Butler avenues, . .	May 30, 1892.
" " "	Linwood avenue, from Cranston street to Dexter,	May 31, 1892.
" " "	Potter's avenue, from Cranston street to Dexter,	June 23, 1892.
" 20, "	Common street, from Jefferson to Mulberry, . .	April 13, 1892.
" " "	Hudson street, from summit to Parade, . .	April 20, 1892.
Dec. 7, "	C street, from Lester to Central,	April 21, 1892.
Jan. 2, 1892,	Hammond street, from Gilbert to Cranston, .	May 4, 1892.
" " "	Hyat street, from Amherst to Manton avenue, .	April 1, 1892.
" " "	Sprague street, from Greenwich to Dexter, .	May 14, 1892.

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No. of resolution.	Date of approval.		Date of complati
98.	Feb. 20, 1892.	Carter street, from Greenwich to near Bucklin street, .	June 23, 1
115.	Mar. 11, "	Messer street, from its summit to Cranston street,	May 25, 1
191.	April 19, "	Wood street, from its summit to Parade, . .	May 10, 1
231.	" 22, "	Exchange street, from Exchange Place to Westminster street, .	June 11, 1

At the close of the quarter work upon the following ers of the improved sewerage system was in prog namely:

No. of resolution.	Date of approval.	
723.	Nov. 10, 1891,	*Gordon avenue, Prairie av Logan avenue, and Ocean street*
113.	Mar. 11, 1892,	*Colfax street, from Gordon av to Prairie avenue.*
276.	May 10, "	*Delaine and Valley streets.*

Work upon the following lateral sewers was in pro at the close of the quarter, namely:

No. of resolution.	Date of approval.	
791.	Dec. 22, 1891,	*Prairie avenue, from Public to Colfax.*
114.	Mar. 11, 1892,	*Melrose street, from Congress a to Irving street.*
166.	Apr. 12, "	*Academy avenue, Roanoke stree Belmont avenue.*
167.	" " "	*Regent and Academy avenues Dover street.*

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No. of resolution.	Date of approval.	
168.	April 12, 1892,	*Harold street, from Valley to Chalkstone avenue.*
277.	May 9, "	*Amherst and Putnam streets, Atwell's avenue and Covell street.*
289.	" 11, "	*Butler avenue, east side, from President to near Irving.*

Work upon the following sewers, completing the work ordered by the city council, had not commenced June 30, 1892, viz.:

No. of resolution.	Date of approval.	
51.	Jan. 22, 1892,	*Branch avenue, North Main street, Livingstone avenue and Whelden street.*
112.	Mar. 11, "	*Bellevue avenue, from Dexter street to Cranston.*
165.	April 12, "	*Chalkstone avenue, from Harold street to Claremont avenue.*
169.	" " "	*Eagle and Valley streets, improved sewerage system.*
189.	" 19, "	*Public street, from Broad to Hamilton.*
190.	" " "	*Steuben street, from Atwell's avenue to Manton.*
263.	May 9, "	*Congress avenue, from Broad street to Hamilton.*
264.	" " "	*Harrison street, from High to Cranston.*
265.	" " "	*Manton avenue, from near Florence street to Woonasquatucket river.*
287.	" 11, "	*Colfax and Ocean streets.*
288.	" " "	*Spruce street and Brayton avenue.*
312.	" 21, "	*High street, from the city line to Valley street.*
313.	" " "	*Pennsylvania avenue, from Broad street to Prairie avenue.*

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No. of resolution.	Date of approval.	
319.	June 8, 1892,	*Bucklin street, from Carter to Ea*
320.	" " "	*Kossuth street, from Putnam Bowdoin.*

The amount of bills approved on account of sewers fro April 1 to June 30, 1892, inclusive, was:

FOR CONSTRUCTION.

Regular appropriation	$77,201 00	
Improved sewerage appropriation	98,182 51	
		$175,383

Charged as follows:

Materials	$30,230 92
Salaries of assistant engineers	1,329 05
Sundries, improved sewerage system	651 71
Testing cement	520 58
Additional catch basins	441 45
Clerks' salaries	375 00
Tools	62 28
Sundries	40 25
Sewer in Academy avenue, Roanoke street and Belmont avenue	1,437 33
Sewer in Amherst street, Putnam street, Atwell's avenue and Covell street	1,297 15
Sewer in Butler avenue, from 100 feet north of Douglas street to Pitman	625 30
Sewer in Butler avenue, east side, from President to near Irving	475 98
Sewer in C street, from Lester to Central	893 23
Sewer in Carter street, from Greenwich to Bucklin	305 86
Sewer in Chalkstone avenue, from Harold street to Claremont avenue	218 68
Sewer in Chapin avenue, from its summit to Cranston street	607 10
Sewer in Common street, from Jefferson to Mulberry	341 93
Sewer in Cranston street, from Wendell to Potter's avenue	5,357 29
Sewer in Earl street, from Greenwich to section 9	1,207 06
Sewer in Exchange street, from Exchange Place to Westminster street	995 77
Sewer in Hammond street, from Gilbert to Cranston	1,459 09
Sewer in Harold street, from Valley to Chalkstone avenue	2,916 99
Sewer in Hudson street, from its summit to Parade	495 37
Amount carried forward	$52,285 37

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Amount brought forward	$52,285 37
Sewer in Hyat street, from Amherst to Manton avenue	7 00
Sewer in Irving and Butler avenues, from Grotto to Blackstone Park	2,279 63
Sewer in Linwood avenue, from Cranston street to Dexter	4,284 17
Sewer in Mawney street, from Greenwich to Dexter	1,788 92
Sewer in Melrose street, from Congress avenue to Irving street	186 02
Sewer in Messer street, from its summit to Cranston	633 51
Sewer in Parade street, from Willow to Cranston	1,776 93
Sewer in Pennsylvania avenue, from Broad street to Prairie avenue	18 20
Sewer in Potter's avenue, from Cranston street to Dexter	5,451 92
Sewer in Prairie avenue, from Public street to Colfax	3,874 96
Sewer in Regent and Academy avenues and Dover street	4,448 17
Sewer in Sprague street, from Greenwich to Dexter	1,593 40
Sewer in Waverly street, from Cranston to Dexter	1,086 24
Sewer in Westfield street, from Harrison to Dexter	566 52
Sewer in West Exchange and Ridge streets	5,598 86
Sewer in Wood street, from its summit to Parade	464 53
Sewer in Delaine street, from Manton avenue to the river	1,119 52
Sewer in Delaine and Valley streets	80 34
Sewer in Dexter street, from Cranston to Potter's avenue	79 80
Sewer in Disposal Division, Section 1	182 12
Sewer in Elmwood Division, Section 2	278 63
Sewer in Elmwood Division, Section 6	11,232 43
Sewer in Elmwood Division, Section 7	305 76
Sewer in Elmwood Division, Section 8	1,841 30
Sewer in Elmwood Division, Section 9	14,486 09
Sewer in Gordon avenue, etc., Elmwood Division	28,071 06
Sewer in Hamilton, Irving and Melrose streets	15,556 88
Sewer in Humboldt and Wayland avenues and Blackstone Park	8 00
Sewer in Valley and Eagle streets	73 09
Contract reservations	15,373 14
Grading Ernest street, from Eddy to Allen's avenue	351 00
	$175,383 51

For maintenance, ... $5,187 65

Charged as follows:

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Cleaning basins and sewers	$1,384 48
Repairing basins and sewers	1,170 91
Cleaning and repairing old drains	907 83
Inspection of connections	580 63
Barn expenses	422 92
Salary, superintendent	351 00
Tools	129 43
Horses, wagons, harnesses, etc	121 63
Cleaning private connections	38 18
Sundries	34 24
Telephone lines	25 06
Filling cisterns, etc	21 34
	$5,187 65

The *net* expenditure for construction of sewers to June 30, 1892, inclusive, was $3,263,471

The *net* expenditure for maintenance of sewers to June 30, 1892, inclusive, was ..... $354,57[illegible]

Bills deposited with the city treasurer for collection, from April 1 to June 30, 1892, inclusive, amounted to $2,252

As follows:

Cleaning private connections	$96 61
Filling cisterns, etc	26 63
Making sewer connections	19 05
Manure from barn	7 00
Carson trenching machine	2,100 00
Sewer material	3 28
	$2,252 57

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $2,338

As follows:

Cleaning private connections	$88 06
Filling cisterns, etc	20 98
Making sewer connections	19 05
Manure from barn	7 00
Carson trenching machine	2,100 00
Sewer material	103 28
	$2,338 37

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HIGHWAYS.

Six permits to open streets were issued during the quarter.

April 1st, the offer of Kenneth McKay to recut the old granite blocks laid in Cranston street, was accepted.

May 10th, the offer of Studebaker Brothers Manufacturing Company, of South Bend, Indiana, to furnish a sprinkling cart delivered in this city, was accepted.

May 20th, the offer of Crabtree & Havey, of West Sullivan, Maine, to furnish and deliver ten thousand feet of granite curbing, was accepted.

May 28th, the offer of John E. Collins, of Westerly, R. I., to furnish and deliver about seventy-five thousand granite paving blocks, was accepted.

June 3d, the offer of Post Engineering Company, of Boston, Mass., to furnish and deliver in this city a fifteen ton road roller, was accepted.

June 10th, the offer of Frederick E. Shaw to grade the square formed by the intersection of Oriental, Admiral and Charles streets, was accepted.

June 20th, the offer of John E. Collins, of Westerly, R. I., to furnish and deliver one hundred thousand granite paving blocks, was accepted.

During the quarter statements of the cost of concreting sidewalks, with ten per centum added to cover cost of assessing and collecting, were certified to the assessors of taxes, viz.:

Chalkstone avenue, from Manton bridge to Fruit Hill aveuue..	$67 53
South Main street, from Crawford to Transit.....	46 04
Manning street, from Cooke to Hope.....	57 02
Eddy street, east side, from the old city line to Thurber's avenue	804 99
Lippitt street, from North Main to Dwight.....	885 72
Ford street, from Cranston to Dexter.....	118 92
Total.....	$1,980 22

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During the quarter the following work was completed:

Sidewalks to be Curbed and Gutters Paved.

Date of order.			
April	17,	1890,	*Hyat street, from Amherst to Kossuth.*
May	21,	1891,	*Hanover street, from Dexter westerly to the present end of curbing.*
Sept.	17,	"	*Bowdoin street, from Appleton to Kossuth.*
"	"	"	*Burnett street, from Bucklin to Dexter.*
"	"	"	*Bucklin street, from Hawthorne to Carter.*
Oct.	15,	"	*Dexter avenue, from Broad street to Lockwood.*
"	"	"	*Calder street, from Potter's avenue to land of N. Y. P. & B. R. R. Co.*
"	"	"	*Ambrose street, from Chalkstone avenue to Webster street.*
Nov.	19,	"	*Dart street, from McKenna to West River.*
"	"	"	*Baker street, from Broad to Eddy.*
Dec.	17,	"	*Earl street, from Greenwich street to line of the N. Y. P. & B. R. R.*
Feb.	18,	1892,	*Ellery street, from Willow to Chapin avenue.*
"	"	"	*Harriet street, from Potter's avenue to Sayles street.*
"	"	"	*Hudson street, from Messer to Ellery.*
May	19,	"	*America street, from Asia to Europe.*
"	"	"	*Delhi street, from Chalkstone avenue to Webster street.*
"	"	"	*Durfee street, from Hammond to Dexter.*

To be Built.

No. of resolution.	Date of approval.		
785.	Jan. 3,	1891,	*Kinsley avenue, from Hemlock street to Eagle.*
410.	June 30,	"	*Greenwich street, from Bridgham to Lexington avenue.*

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Land to be Filled.

No. of resolution.	Date of approval.	
185.	April 14, 1891,	*Edward S. Cheney, Adelaide avenue.*
186.	" " "	*Estate of Joseph J. Cooke, Adelaide avenue.*
187.*	" " "	*William R. Randall, Adelaide avenue.*
188.	" " "	*Heirs of Adnah Sackett, Adelaide avenue.*
590.	Sept. 22, "	*Estate of Alfred Anthony, Adelaide avenue.*

To be Paved with Granite Blocks.

726.	Nov. 20, 1891,	*Brook street, from Wickenden to Power.*
822.	Jan. 2, 1892,	*South Main street, from Crawford to Planet.*
141.	April, " "	*High street, from Broad to Cranston.*

Remove Obstructions and Reset Curb.

Date of order.		
Oct.	15, 1891,	*South Main street, from Crawford to Planet.*

To take Possession of and Remove Obstructions.

Dec.	17, 1891,	*Winslow place, from Broad street to High.*

To Concrete Sidewalks.

No. of resolution.	Date of approval.	
824.	Jan. 2, 1892,	*Manning street, from Cooke to Hope.*
62.	" 26, "	*Greenwich and Burnett streets, adjoining estate of Elmwood Club.*
127.	Mar. 22, "	*Eddy street, east side, from the old city line to Thurber's avenue.*

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No. of resolution.	Date of approval.	
206.	Apr. 19, 1892,	*Chalkstone avenue, from Manton bridge to Fruit Hill avenue.*
222.	" 22, "	*Lippitt street, from North Main to Dwight.*
318.	June 8, "	*Ford street, from Cranston to Dexter.*
330.	" " "	*Chalkstone avenue, adjoining the second police station.*

To Concrete Gutters.

128.	Mar. 22, 1892,	*Burnett street, from Greenwich to Bucklin.*

To Build Driveway.

285.	May 11, 1892,	*Chalkstone avenue, Police Station No. 2, stable.*

To Grade and Pave Gutter.

Date of order.	
April 21, 1892,	*Wayne street, from Douglas avenue to Candace street.*

The following work was in progress June 30, 1892, viz.:

Sidewalks to be Curbed and Gutters Paved.

Date of order.		
Nov.	20, 1890,	*Chalkstone avenue, from Mount Pleasant to Academy:*—Curbing set and gutters paved.
Jan.	15, 1891,	*Ashburton street, from Charles to Tremont:*—Two-thirds completed.
May	21, "	*Kinsley avenue, from Gaspee street to Eagle:*—Curbing three-fourths set.
Oct.	15, "	*Belmont avenue, from Claremont to Academy:*—in process.

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Date of order.			
Oct.	15,	1891,	*Claremont avenue, from Roanoke street to Chalkstone avenue:*—Curbing set and gutters paved.
"	"	"	*Charles street, from Branch avenue to Ledge street:*—Curbing set.
Nov.	19,	"	*Waverly street, from Cranston to Dexter:*—Completed except rolling and concreting gutters.
Dec.	17,	"	*Branch avenue, from Langdon street to Douglas avenue:*—Three-fourths completed.
April	21,	1892,	*Regent avenue, from Academy to Harold street:*—In process.
May	19,	"	*Manton avenue, from Erastus street to Atwell's avenue:*—In process.

To be Built.

No. of resolution.	Date of approval.		
655.	Oct.	28, 1890,	*Kinsley avenue, from Gaspee street to Hemlock:*—two-thirds completed.

To be Brought to Grade.

Date of order.			
June	23,	1891,	*Elmwood avenue, from Roger Williams to the bridge over tracks of the N. Y. P. & B. R. R. Co.:*—In process.

No. of resolution.	Date of approval.		
790.	Dec.	22, 1891,	*Charles, Admiral and Oriental streets:*—In process.
797.	"	" "	*Ernest street, from Eddy to Allen's avenue:*—In process.

To be Paved with Granite Blocks.

530.	Sept.	9, 1891,	*Cranston street, from near Winter to 140 feet south of Waverly street:*—Nearly completed.

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No. of resolution.	Date of approval.	
823.	Jan. 2, 1892,	*Tockwotton street, from Ives to Gano:* In process.
317.	June 8, "	*High street, from Cranston to Knight:* Nearly completed.

The following work ordered by the board of aldermen and city council, had not commenced June 30, 1892, namely:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.		
Sept.	17, 1891,	*Irving avenue, from Butler to Grotto.*
Feb.	18, 1892,	*Sheldon street, from Benefit to Brook.*
April	21, "	*Cambridge street, from Academy avenue to Sears.*
May	19, "	*Carleton street, from Yale avenue to Beaufort street.*
"	" "	*Colfax street, from Plain to Broad.*
"	" "	*Congdon street, from Halsey to Jencks.*
"	" "	*Gallup street, from Prairie avenue to Broad street.*
"	" "	*Hemlock street, from Valley to Woonasquatucket river.*
"	" "	*Irving avenue, from Arlington to Taber.*
"	" "	*Ives street, from Power to Pitman.*
"	" "	*Miner street, from Oxford to Fruit.*
"	" "	*Quaid street, from Charles to first angle in said Quaid street.*
"	" "	*Harris avenue, from Broadway to Atwell's avenue.*

TO BE PAVED WITH GRANITE BLOCKS.

No. of resolution.	Date of approval.	
613.	Sept. 30, 1891,	*Broad street, from Dorrance to Chestnut.*

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To Macadamize or Asphalt Roadway.

. of resolution. Date of approval.

:1. Jan. 2, 1892, *North Burial Ground, from entrance to North Main street.*

To Take Possession and Remove Obstructions.

Date of order.

ov. 5, 1891, *Butler avenue, from Irving to the city line.*

o Take Possession, Remove Obstructions and Grade.

une 2, 1892, *Bucklin street, from Daboll to Cromwell.*

To Reset Curbing.

'une 30, 1892, *Parade street, between Cranston and High.*

Bills approved on account of highways from April 1 to June 30, 1892, inclusive, amounted to:

Regular appropriation	$57,003 56	
Special appropriation	108,122 19	
		$165,125 75

Classified as follows:

Repairs on unpaved streets	$16,822 77
Cleaning streets	16,151 91
Crushed stone—material and labor	8,334 49
Repairs on paved streets	2,236 03
Barn expenses	2,199 52
Tools, implements, etc	1,466 66
Screening gravel	1,376 35
Blacksmith and wheelwright shop	1,337 81
Horses, wagons, harnesses, etc	1,024 21
Stone—paving and crosswalk	937 92
Steam rollers, repairs and supplies	683 28
Salaries—superintendent and clerks	672 75
Sundries	520 05
Repairs on stone crushers	307 24
Amount carried forward	$54,070 93

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Amount brought forward	$54,070 99	
Watchman at city yard	227 85	
Watering streets	147 86	
Fencing streets—material and labor	25 32	
Telephone lines	15 01	
		$54,487 03

NEW WORK.—BUILDING AND REBUILDING STREETS, ETC., SIDEWALKS CURBED AND GUTTERS PAVED.

Ambrose street, from Chalkstone avenue to Webster street	$439 61	
America street, from Asia to Europe	88 42	
Ashburton street, from Charles to Tremont	5,332 02	
Baker street, from Broad to Eddy	2,867 46	
Belmont avenue, from Claremont to Academy	380 43	
Bowdoin street, from Appleton to Kossuth	1,382 11	
Branch avenue, from Langdon street to Douglas avenue	7,901 94	
Bucklin street, from Hawthorne to Carter	448 52	
Burnett street, from Bucklin to Dexter	893 19	
Calder street, from Potter's avenue to land of New York, Providence and Boston Railroad Co	1,707 27	
Cambridge street, from Academy avenue to Sears	91 57	
Carleton street, from Yale avenue to Beaufort street	588 65	
Charles street, from Branch avenue to Ledge street	4,012 46	
Chalkstone avenue, from Mt. Pleasant to Academy	2,830 90	
Claremont avenue, from Roanoke street to Chalkstone avenue	1,518 19	
Dart street, from McKenna to West River	599 18	
Delhi street, from Chalkstone avenue to Webster street	1,335 52	
Dexter avenue, from Broad street to Lockwood	678 18	
Durfee street, from Hammond to Dexter	706 09	
Earl street, from Greenwich to line of New York, Providence and Boston Railroad	879 88	
Ellery street, from Willow to Chapin avenue	1,083 65	
Hanover street, from Dexter westerly to present end of curb	923 90	
Harriet street, from Potter's avenue to Sayles street	835 57	
Hemlock street, from Valley to Woonasquatucket river	80 91	
Hudson street, from Messer to Ellery	1,319 90	
Hyat street, from Amherst to Kossuth	208 93	
Irving avenue, from Arlington to Taber	33 00	
Irving avenue, from Butler to Grotto	33 25	
Ives street, from Power to Pitman	63 17	
Manton avenue, from Erastus street to Atwell's avenue	1,238 30	
Amounts carried forward	$40,502 17	$54,487 03

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Amounts brought forward	$40,502 17	$54,487 03
Miner street, from Oxford to Fruit	36 65	
Quaid street, from Charles to first angle in said Quaid street	17 35	
Regent avenue, from Academy to Harold street	349 90	
Sheldon street, from Benefit to Brook	36 57	
Waverly street, from Cranston to Dexter	3,613 36	
		44,556 00

PAVE WITH GRANITE BLOCKS.

Brook street, from Wickenden to Power	$9,373 79	
Cranston street, from 30 feet south of Winter to 140 feet south of Waverly	9,810 72	
High street, from Broad to Cranston	28,869 36	
High street, from Cranston to Knight	4,442 23	
South Main street, from Crawford to Planet	3,750 13	
Tockwotton street, from Ives to Gano	779 14	
		57,025 37

TO BE BUILT.

Greenwich street, from Bridgham to Lexington avenue	$1,188 41	
Kinsley avenue, from Gaspee street to Hemlock	467 25	
Kinsley avenue, from Hemlock street to Eagle	297 28	
		1,952 94

TO BE BROUGHT TO GRADE.

Balch street, Pacific avenue, Hamburg avenue and Burrington street	$390 60	
Charles, Admiral and Oriental streets	2,438 51	
Wayne street, from Douglas avenue to Candace street	1,802 22	
		4,631 33

REMOVE BUILDINGS AND OTHER IMPEDIMENTS.

Winslow Place, from Broad street to High		71 75

SIDEWALK CURBED AND CONCRETED FOR DRIVEWAY.

Chalkstone avenue, adjoining police station No. 2, stable		18 55

GUTTERS CONCRETED.

Burnett street, from Greenwich to Bucklin		118 77

SIDEWALKS CONCRETED.

Chalkstone avenue, adjoining second police station	7 50	
Amounts carried forward	$7 50	$162,861 74

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Amounts brought forward	$7 50	$162,861 74
Greenwich and Burnett streets, adjoining estate of Elmwood Club	73 35	80 85

LANDS TO BE FILLED.

Land of *Heirs of Adnah Sackett et al.*, on Adelaide avenue		2,183 16
		$165,125 75

Bills deposited with the city treasurer for collection from April 1 to June 30, 1892, inclusive, amounted to $301 73

As follows:

Street sweepings	$183 00
Labor and materials	68 73
Manure from barn	47 00
Chopping blocks	3 00
	$301 73

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $386 47

As follows:

Street sweepings	$188 00
Labor and materials	148 47
Manure from barn	47 00
Chopping blocks	3 00
	$386 47

SIDEWALKS AND CURBING.

The expenditures on account of sidewalks and curbing from April 1 to June 30, 1892, inclusive, amounted to $21,864 61

Charged as follows:

Granite curbing	$19,941 27
Concreting sidewalks	1,923 34
	$21,864 61

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Curbing bills deposited with the city treasurer for collection, from April 1 to June 30, 1892, inclusive, amounted to $256 33

During the quarter coupons from curbing bills collected have been returned by the city treasurer and receipted for, amounting to . $12,609 85

CITY ENGINEER.

Bills approved on account of city engineer's department from April 1 to June 30, 1892, inclusive, amounted to $13,280 29

Charged as follows:

Salary—city engineer	$1,416 67
Salaries of assistants	10,645 13
Salaries of clerks	703 75
Supplies—drawing materials, etc.	228 84
Horse car tickets, etc.	220 00
Instruments and repairs	40 60
Sundries	25 30
	$13,280 29

Bills deposited with the city treasurer for collection from April 1 to June 30, 1892, inclusive amounted to $14 48

As follows:

Drawing materials, etc.	$6 88
Set of sewer diagrams	4 00
Steel tapes	3 60
	$14 48

During the quarter coupons from bills collected have been returned by the city treasurer and recipted for, amounting to . . . $14 48

As follows:

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Drawing materials, etc.	$6 88
Set of sewer diagrams	4 00
Steel tapes	3 60
	$14 48

BRIDGES.

Bills approved on account of bridges from April 1, to June 30, 1892, inclusive, amounted to: $15,069

Charged as follows:

Atwell's avenue bridge	$226 75
Barn expenses	36 49
Branch avenue bridge	4 25
Building at city yard	66
Cemetery street bridge	1 27
Central or Red bridge	1,492 54
Charles street bridge	2 54
Eagle street bridge	195 70
Gaspee street bridge	35 19
Hawkins street bridge	58 21
Horses, wagons, harnesses, etc	235 59
Lumber, hardware, etc	266 74
Manton bridge	6 75
Park street bridge	2 54
Point street bridge	6,772 94
Randall street bridge	18 12
Rent of keeper's house, Washington bridge	30 00
Salaries—Point street bridge	978 25
Salaries—Central or Red bridge	455 00
Salaries—Washington bridge	481 68
Smithfield avenue bridge	6 60
Sundries	24 06
Tar bridge, Manton avenue	14 34
Tools	115 83
Valley street bridge, north span	160 59
Valley street bridge, south span	170 57
Wanskuck bridge	2 05
Washington bridge, near India Point	3,221 21
Washington bridge, over Providence river	30 62
Weybosset bridge	21 93
West River street bridge	35
	$15,069 36

Bills deposited with the city treasurer for collection from April 1 to June 30, 1892, inclusive, amounted to: $38

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As follows:

Old lumber from various bridges	$37 25
Old row boat	1 00
	$38 25

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $38 25

As follows:

Old lumber from various bridges	$37 25
Old row boat	1 00
	$38 25

ROBERT E. SMITH,

Commissioner.

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THIRTY-NINTH QUARTERLY REPORT

OF THE

DEPARTMENT OF PUBLIC WORKS

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING SEPTEMBER 30, 1892.

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REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., Oct. 1, 1892.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the thirty-ninth quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and the cost of same for the quarter ending September 30, 1892.

WATER WORKS.

The average daily consumption of water during the last quarter was 9,021,199 gallons.

Water pipes were laid during the quarter as follows:

12-INCH.

In East avenue..... 1,456.17 feet.

8-INCH.

In Canton, Carleton, Charles, Oriental, Silver Spring and West River streets, Elmwood, High Service, Kinsley, Montgomery and Union avenues; in Plainfield street, Town of Johnston, and in Woodbine street and Allen's avenue, Town of Cranston..... 4,237.21 feet.

6-INCH.

In Adie, Ashburton, Atkins, Babcock, Balch, Burke, California, Cambridge, Cemetery, Chatham, Congdon, Derry, Douglas, East Manning, Eighth, Elton, Faith, Flora, Fourth, Frankfort, Fruit, Gallup, Grand, Hall, Kane, Manning, Margaret, May, Melrose, Morgan, Oriental, Padelford, Plum, Printery, Quaid, Sixth, Smith,

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Stockwell, Thayer, Tyler, Van Zandt and Waldo streets; Academy, Atlantic, Belmont, Elm Grove, Hamburg, Highland, High Service, Linwood, Livingston, Massachusetts, Oriole, Pacific, Rhode Island, Summit, Vermont, Virginia and Wayland avenues, and Dyerville road; in Allen, Harlan, Lawrence, Lexington and North streets and Miller avenue, Town of Johnston, and in America, Clarendon, Germania, Greenwood, Margaret and Morgan streets, Columbia, Jackson, Wentworth and Wheeler avenues, Town of Cranston	19,644.92 feet.
Total	25,338.30 feet.

or 4.80 — miles.

Water pipes were removed during the quarter as follows:

8-INCH.

In Oriental street	16.92 feet.

6-INCH.

In Ashburton and Printery streets, Livingston avenue and Exchange Place	179.76 feet.
Total	196.68 feet.

or .037 + miles.

Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.00 feet.
30-inch	59,893.04 feet.
24-inch	43,418.92 feet.
20-inch	9,626.59 feet.
16-inch	31,922.58 feet.
12-inch	76,981.72 feet.
10-inch	14,652.26 feet.
8-inch	209,969.65 feet.
6-inch	884,395.92 feet.
Total	1,340,944.68 feet.

or 253.967—miles.

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Twenty-five fire hydrants have been set during the quarter, one in each of the following locations:

Allen's avenue, Cranston, opposite the north line of Columbia avenue.
Armington avenue, Cranston, at the corner of Allen's avenue.
Arnold avenue, Cranston, at the corner of Allen's avenue.
Arnold avenue, Cranston, at the corner of Pawtuxet avenue.
Chalkstone avenue, north side, opposite Canton street.
Clarendon avenue, Cranston, at the corner of Auburn street.
Columbia avenue, Cranston, at the corner of Pawtuxet avenue.
Cranston street, Cranston, between Print Works and Town Hall.
Dyer avenue, Cranston, near Roger Williams avenue.
Fourth street, north side, 255 feet east of Highland avenue.
Frankfort street, east side, about 160 feet south of Balch street.
Greenwood street, Cranston, at the corner of Laurens street.
Hemlock street, east side, about 260 feet north of Promenade street.
Kinsley avenue, south side, about 470 feet west of Gaspee street.
Laurens street, Cranston, at the corner of Grace street.
Magnolia avenue, Cranston, at the corner of Auburn street.
Montgomery avenue, north side, about 300 feet east of Virginia avenue.
Orchard street, Cranston, at the corner of Auburn street.
Page street, at the northeast corner of Broad street.
Park avenue, Cranston, at the corner of Wellington street.
Richards street, Cranston, at the corner of Grace street.
Silver Spring street, east side, at the southeast corner of Grafton street.
Thayer street, east side, at the southerly corner of Manning street.
Vermont avenue, north side, about 200 feet west of Virginia avenue.
Wentworth avenue, Cranston, north side, about 480 feet east of Broad street.

The total number of fire hydrants is now fourteen hundred and seventy-two; fourteen hundred and twenty-three flush, and forty-nine post hydrants.

All the water pipes ordered laid by the City Council to September 30, 1892, have been completed.

During the quarter two hundred and fifty-five water meters were set, of which number sixteen were to replace other meters. The use of nine meters was discontinued.

The following water meters were in use at the close of the quarter.

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Kind.	Size.							Total.
	⅝-in.	¾-in.	1-in.	1½-in.	2-in.	3-in.	4-in.	
Ball & Fitts, piston	3,068	600	148	38	5	.....	.....	3,859
Ball & Fitts, rotary	.....	.....	22	23	3	5	3	56
Crown	5,000	657	176	74	22	9	9	5,947
Fales, Jencks & Son	1	1	1	.....	.....	.....	.....	3
Thomson	620	83	16	18	3	2	.....	742
Worthington	9	1	.....	.....	1	.....	1	12
	8,698	1,342	363	153	34	16	13	10,619

Four plumbers' licenses were issued during the quarter, making the total number eighty-five, all of which expire December 31, 1892.

Nine hundred and eighty-nine permits to do plumbing work were issued during the quarter.

Three hundred and thirty-two applications for water were made during the quarter, making the total number September 30, 1892, eighteen thousand one hundred and seventy-one.

The number of new service stops opened during the quarter was three hundred and twenty-three.

The total number of service stops opened to September 30, 1892, inclusive, was seventeen thousand four hundred and twelve. The number in actual use September 30, 1892, was sixteen thousand four hundred and thirteen.

The amount of bills approved on account of water works from July 1 to September 30, 1892, inclusive, was:

For construction and extension, . . $19,659 19

Classified as follows:

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Cast iron water pipe	$7,705 11
Laying water pipe	4,897 46
Contract reservations	3,354 74
Laying service pipe	1,136 12
Special castings	944 27
Fire hydrants, boxes and covers	419 42
Labor on and carting pipe	341 67
Barn expenses	245 25
Horses, wagons, harnesses, etc.	237 85
Wharf salaries	179 36
Tools	100 19
Stop valves	65 35
Taps and stops	18 40
Fruit Hill reservoir, for construction	14 00
	$19,659 19

For maintenance, ... $17,410 37

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$2,776 77	
Firemen	807 79	
Sundries	733 14	
Engineers	524 78	
Superintendence	305 57	
Lights	174 25	
Oil, waste and packing	106 26	
Care of grounds	104 25	
Labor on fuel	92 55	
Corliss pumping engine and house	65 28	
Barn expenses	43 67	
Real estate	21 99	
Worthington pumping engine	2 75	
Cornish engine house	2 70	
Cornish pumping engine	63	
		$5,762 38

SOCKANOSSET RESERVOIR.

Watchman	$139 50	
Sundries	75 38	
		214 88
Amount carried forward		$5,977 26

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Amount brought forward		$3,[illegible]

Hope Pumping Station.

Engineers	$587 89	
Firemen	539 80	
Care of grounds	134 75	
Lights	84 25	
Hope pumping engine, No. 1	80 13	
Sundries	65 40	
Oil, waste and packing	46 34	
Hope pumping engine, No 2	42 41	
		1,[illegible]

Hope Reservoir.

Watchman	$209 25	
Sundries	135 00	
		34[illegible]

Fruit Hill Reservoir.

Watchman	$172 00	
Sundries	4 25	
		17[illegible]

Pipe Line and Service Stops.

Repairs	$1,827 41	
Superintendence—salaries	714 96	
		2,[illegible]

Meter Department.

Water Meters	$2,133 69	
Setting and repairing meters	1,095 95	
		3,[illegible]

Miscellaneous.

Clerks' and inspectors' salaries	$2,146 86	
Telephone lines	600 00	
Prevention of defilement of the Pawtuxet	407 52	
Horses, wagons, harnesses, etc	125 50	
Barn expenses	115 69	
Analyses of water	94 50	
Public drinking fountains and troughs	34 01	
Sundries	30 30	
Pipe yard, office expenses	5 25	
		3,[illegible]
		$17,[illegible]

The amount of expenditures from July 1 to Sept. 30, 1892, inclusive, was . . . $37,06[illegible]

The total expenditures to Sept. 30, 1892, inclusive, were . . . . . $7,549,39[illegible]

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The *net* expenditure for construction and extension from July 1 to Sept. 30, 1892, inclusive, was..... $18,301 94

The *net* expenditure for construction and extension to Sept. 30, 1892, inclusive, was..... $5,821,734 95

The *net* expenditure for maintenance from July 1 to Sept. 30, 1892, inclusive, was..... $9,681 51

The *net* expenditure for maintenance to Sept. 30, 1892, inclusive, was..... $1,079,932 97

Bills deposited with the city treasurer for collection, from July 1 to Sept. 30, 1892, inclusive, amounted to $48,894 50

As follows:

Water	$39,826 87
Water meters	5,731 50
Setting and repairing meters	1,589 93
Rent of real estate	222 52
Examination and repairs of pipe line	71 35
Permanently closing service stops	35 00
Penalties	14 00
Labor and materials, laying service pipes, etc	1,391 33
Manure from pipe yard barn	12 00
	$48,894 50

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . $62,143 43

As follows:

Water	$53,043 32
Water meters	6,002 50
Setting and repairing meters	1,463 68
Rent of real estate	192 43
Permanently closing service stops	40 00
Examination and repairs of pipe line	30 25
Penalties	14 00
Labor and materials, laying service pipes, etc	1,345 25
Manure from pipe yard barn	12 00
	$62,143 43

The amount of bills approved on account of water works for the fiscal year ending Sept. 30, 1892, inclusive, was:

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For construction and extension, . . $129,505 2[illegible]

Classified as follows:

Cast iron water pipe	$51,297 18
Laying water pipe	19,948 67
Fire hydrants, boxes and covers	14,946 17
Fruit Hill reservoir, for repairs	10,523 58
Special castings	5,639 59
Stop valves	4,525 10
Laying service pipe	4,223 12
Contract reservations	3,845 11
Service pipe	3,517 10
Fruit Hill reservoir, for construction	3,477 82
Taps and stops	1,869 50
Labor on and carting pipe	1,663 95
Rent of wharf and pipe yard	1,500 00
Barn expenses	840 47
Wharf salaries	705 86
Horses, wagons, harnesses, etc	590 62
Tools	387 85
Sundries	3 56
	$129,505 25

For maintenance, ... $84,78[illegible]

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$10,111 65
Firemen	2,922 09
Sundries	2,823 77
Engineers	2,258 39
Superintendence	1,062 89
Lights	755 00
Care of grounds	744 96
Real estate	554 01
Cornish engine house	509 25
Oil, waste and packing	415 94
Labor on fuel	407 33
Corliss pumping engine and house	301 65
Barn expenses	195 26
Worthington pumping engine	25 53
Cornish pumping engine	20 38

Amount carried forward $23,108

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Amount brought forward		$23,108 10
Sockanosset Reservoir.		
Sundries	$583 77	
Watchman	549 00	
		1,132 77
Hope Pumping Station.		
Coal and wood	$2,408 36	
Engineers	2,313 64	
Firemen	1,860 60	
Lights	460 00	
Care of grounds	417 80	
Sundries	209 63	
Oil, waste and packing	131 57	
Hope pumping engine, No. 1	118 42	
Hope pumping engine, No. 2	47 87	
		7,967 89
Hope Reservoir.		
Watchman	$823 50	
Sundries	817 90	
		1,641 40
Fruit Hill Reservoir.		
Watchman	$172 00	
Sundries	4 25	
		176 25
Pipe Line and Service Stops.		
Repairs	$6,383 20	
Superintendence—salaries	2,665 06	
		9,048 26
Meter Department.		
Water meters	$14,688 67	
Setting and repairing meters	4,331 32	
		19,019 99
Miscellaneous.		
Clerks' and inspectors' salaries	$11,693 40	
Town of Cranston, tax	5,923 00	
Prevention of defilement of the Pawtuxet	1,343 10	
Telephone lines	1,010 46	
Barn expenses	786 83	
Horses, wagons, harnesses, etc	674 48	
Town of North Providence, tax	400 00	
Analyses of water	394 85	
Sundries	178 23	
Public drinking fountains and troughs	153 59	
Pipe yard, office expenses	61 60	
Real estate at Pawtuxet	52 50	
Town of Lincoln, tax	15 75	
		22,687 79
		$84,782 45

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SEWERS.

During the quarter ending September 30, 1892, three hundred and forty permits were issued to drain layers; two hundred and eighty-nine for new work and fifty-one for extension and repairs of drains.

Four drain layers' licenses were issued during the quarter, making the total number thirty-eight, all of which expire December 31, 1892.

August 17th, the proposal of Winslow & Co., of Portland, Maine, to furnish and deliver in this city, sewer pipe, branches, etc., was accepted, and a contract was subsequently executed. Amount, $13,825.65.

August 22d, Manchester & Hudson's contract, dated November 23, 1891, was extended for one hundred additional large flagstones.

July 2d, a contract for the construction of the following sewer, which was subsequently executed, was awarded as follows, namely:

[The amounts given below are what are estimated will be paid the contractors for labor, and do not include cost of inspection and materials, or rock excavation.]

To John Keogh.

No. of resolution.	Date of approval.		
397.	July 1, 1892,	*Benefit street, from Tockwotton to the harbor wall,* . . .	$1,129 20

July 16th, a contract for the construction of the following sewer was awarded and executed as follows, namely:

To George R. Newman.

No. of resolution.	Date of approval.		
411.	July 1, 1892,	*Putnam street, from*	
440.	" 12, "	*Amherst to Kossuth,*	$855 40

July 22d, contracts for the construction of the following sewers, which were subsequently executed, were awarded as follows, namely:

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To Frederick E. Shaw.

No. of resolution.	Date of approval.		
398.	July 1, 1892,	*Gallup street, from Broad to summit east of Prairie avenue,* . .	$1,481 35

To John Keogh.

363.	July 1, 1892,	*Candace, Winsor, Orms, Valley and Smith streets,* . . .	$13,396 65
396.	" " "	*Beaufort street and Academy avenue,* .	2,950 80

To Moulton and O'Mahoney.

368.	July 1, 1892,	*From Valley street to Woonasquatucket river, east of Hemlock street,*	$31,631 50

To George R. Newman.

365.	July 1, 1892,	*Common and Carroll streets,* . . .	$928 10
366.	" " "	*Harrison street, from Wilson to Cranston,*	616 10

To Everson and Liddle.

369.	July 1, 1892,	*Hemlock street, from Valley to Woonasquatucket river,* . .	$3,202 20
399.	" " "	*High, Norfolk, Oak and Troy streets,* .	30,466 00

To J. Frank Read & Co.

400.	July 1, 1892,	*Superior street, from Cranston to Dexter,*	$1,718 17

July 26th, a contract for the construction of the following sewer was awarded and executed, namely:

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To George R. Newman.

No. of resolution.	Date of approval.		
364.	July 1, 1892,	*Ocean street, from Public to Colfax,* . .	$4,532 90

August 30th, contracts for the construction of the following sewers, which were subsequently executed, were awarded as follows, namely:

To James J. Newman.

No. of resolution.	Date of approval.		
450.	Aug. 2, 1892,	*Atwell's avenue, from west of Covell street to Putnam,* . . .	$1,381 70

To George R. Newman.

475.	Aug. 2, 1892,	*Ring street, from Almy to Courtland,* . .	$592 25

To John Keogh.

453.	Aug. 2, 1892,	*Cambridge street and Academy avenue,* .	$1,645 70

To J. Frank Read & Co.

474.	Aug. 2, 1892,	*Point street, from Beacon avenue to Plain street,* . . .	$681 40

To Frederick E. Shaw.

451.	Aug. 2, 1892,	*Bernon street, from Douglas avenue to Nolan street,* . .	$1,635 70
452.	" " "	*Bucklin street and Potter's avenue,* . .	2,059 60
454.	" " "	*Glenham, Taylor and Public streets,* . .	2,634 45

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455.	Aug. 2, 1892,	*Hannah street, from Amsterdam to Amherst,* . . .	$348 00
456.	" " "	*Mawney and Updike streets,* . . .	3,861 50
457.	" " "	*Oxford street, from east of Harriet to Prairie avenue,* . .	486 90
459.	" " "	*Potter's avenue, from Greenwich street to Hamilton,* . . .	1,237 25
473.	" " "	*Cromwell street, from Greenwich to Dexter,* .	874 60
476.	" " "	*Salem street, from Waldo to Potter's avenue,*	859 20

September 15th, contracts for the construction of the following sewers, which were subsequently executed, were awarded as follows, namely:

To Everson & Liddle.

No. of resolution.	Date of approval.		
535.	Sept. 7, 1892,	*Hendrick and Carleton streets,* . . .	$1,864 75

To John Keogh.

536.	Sept. 7, 1892,	*Cypress street, from east of Ivy to Camp,* .	277 75

During the quarter the construction of the following sewers was completed, namely:

No. of resolution.	Date of approval.		Date of completion.
723.	Nov. 10, 1891,	*Gordon avenue, Prairie avenue, Logan avenue and Ocean street,*	Sept. 15, 1892.

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No. of resolution.	Date of approval.		Date of completion.
791.	Dec. 22, 1891,	*Prairie avenue, from Public street to Colfax,* . .	July 11, 1892.
112.	Mar. 11, 1892,	*Bellevue avenue, from Dexter street to Cranston,* .	July 29, 1892.
113.	" " "	*Colfax street, from Gordon avenue to Prairie avenue,* . .	Sept. 15, 1892.
114.	" " "	*Melrose street, from Congress avenue to Irving street,* . . .	July 9, 1892.
166.	Apr. 12, "	*Academy avenue, Roanoke street and Belmont avenue,* .	Sept. 17, 1892.
167.	" " "	*Regent and Academy avenues and Dover street,*	August 12, 1892.
168.	" " "	*Harold street, from Valley to Chalkstone avenue,* . . .	August 13, 1892.
263.	May 9, "	*Congress avenue, from Broad street to Hamilton,* .	Sept. 24, 1892.
277.	" " "	*Amherst and Putnam streets, Atwell's avenue and Covell streets,* .	Sept. 10, 1892.
287.	" 11, "	*Colfax and Ocean streets,* . .	July 30, 1892.
288.	" " "	*Spruce street and Brayton avenue,*	Sept. 1, 1892.

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rk upon the following sewers, completing the work
d by the city council, had not commenced September
92, viz.:

esolution. Date of approval.		
May 9,	1892,	*Manton avenue, from near Florence street to Woonasquatucket river.*
July 1,	"	*Common and Carroll streets.*
" "	"	*High, Norfolk, Oak and Troy streets.*
" "	"	*Putnam street, from Amherst to Kossuth.*
August 2,	"	*Atwell's avenue, from summit west of Covell street to Putnam.*
" "	"	*Bernon street, from Douglas avenue to Nolan street.*
" "	"	*Bucklin street and Potter's avenue.*
" "	"	*Hannah street, from Amsterdam to Amherst.*
" "	"	*Oxford street, from east of Harriet to Prairie avenue.*
" "	"	*Potter's avenue, from Greenwich street to Hamilton.*
" "	"	*Cromwell street, from Greenwich to Dexter.*
" "	"	*Ring street, from Almy to Courtland.*
" "	"	*Salem street, from Waldo to Potter's avenue.*
Sept. 7,	"	*Cypress street, from east of Ivy to Camp.*
" 16,	"	*Chalkstone avenue, from Douglas to Candace street.*
" "	"	*Plain street, from Public to Bishop.*
" "	"	*Providence street, from Prairie avenue to Lockwood street.*
" "	"	*Somerset street, from Tanner to Prairie avenue.*

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The amount of bills approved on account of sewers from July 1 to Sept. 30, 1892, inclusive, was:

FOR CONSTRUCTION.

Regular appropriation	$106,968 76	
Improved sewerage appropriation	121,788 52	
		$228,757

Charged as follows:

Materials	$31,829 17
Salaries of assistant engineers	5,337 59
Contract reservations	3,511 00
Clerks' salaries	952 36
Sundries, improved sewerage system	784 97
Rent of wharf and pipe yard	750 00
Testing cement	529 50
Additional catch-basins	79 92
Tools	39 96
Sundries	14 25
Sewer in Academy avenue, Roanoke street and Belmont avenue	3,264 26
Sewer in Amherst street, Putnam street, Atwell's avenue and Covell street	12,545 85
Sewer in Beaufort street and Academy avenue	2,983 86
Sewer in Bellevue avenue, from Cranston street to Dexter	1,932 08
Sewer in Benefit street, from Tockwotton to the harbor wall	1,118 55
Sewer in Branch avenue, North Main street, Livingston avenue, etc	7,185 18
Sewer in Bucklin street, from Carter to Earl	1,140 57
Sewer in Butler avenue, east side, from President to near Irving	975 87
Sewer in Cambridge street and Academy avenue	2,908 43
Sewer in Candace, Winsor and Orms streets, etc	104 77
Sewer in Chalkstone avenue, from Harold street to Claremont avenue	7,223 57
Sewer in Colfax and Ocean streets	3,353 39
Sewer in Congress avenue, from Broad street to Hamilton	1,207 34
Sewer in Gallup street, from Broad to summit east of Prairie avenue	1,586 43
Sewer in Glenham, Taylor and Public streets	1,319 76
Sewer in Harold street, from Valley to Chalkstone avenue	4,443 68
Sewer in Harrison street, from High to Cranston	1,827 74
Sewer in Harrison street, from Wilson to Cranston	731 81
Amount carried forward	$99,681 96

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Amount brought forward	$99,681 96
Sewer in Hemlock street, from Valley to Woonasquatucket river	2,909 90
Sewer in Hendrick and Carleton streets	104 05
Sewer in High street, from city line to sewer in Valley	3,505 96
Sewer in Kossuth street, from Putnam to Bowdoin	351 53
Sewer in Mawney and Updike streets	1,324 51
Sewer in Melrose street, from Congress avenue to Irving street	2,201 73
Sewer in Ocean street, from Public to Colfax	4,858 25
Sewer in Pennsylvania avenue, from Broad street to Prairie avenue	679 48
Sewer in Point street, from Beacon avenue to Plain street	733 08
Sewer in Prairie avenue, from Public street to Colfax	1,233 39
Sewer in Public street, from Broad to Hamilton	1,914 72
Sewer in Putnam street, from Amherst to Kossuth	28 18
Sewer in Regent and Academy avenues and Dover street	2,316 18
Sewer in Ring street, from Almy to Courtland	7 92
Sewer in Spruce street and Brayton avenue	2,154 49
Sewer in Steuben street, from Atwell's avenue to Manton	1,760 04
Sewer in Superior street, from Cranston to Dexter	1,202 62
Sewer in Delaine and Valley streets	53,207 70
Sewer in Disposal Division, Section 1	24 00
Sewer in Elmwood Division, Section 6	4 80
Sewer in Elmwood Division, Section 9	880 70
Sewer in Gordon avenue, etc., Elmwood Division	21,409 53
Sewer in Valley and Eagle streets	9,074 06
Sewer from Valley street to Woonasquatucket river	17,188 60
	$228,757 28

For maintenance, ... $7,304 41

Charged as follows:

Cleaning basins and sewers	$3,714 61
Repairing basins and sewers	970 99
Cleaning and repairing old drains	731 44
Inspection of connections	567 19
Salary, superintendent	398 57
Barn expenses	334 05
Tools	263 77
Horses, wagons, harnesses, etc	149 39
Cleaning private connections	61 08
Filling cisterns, etc	51 02
Telephone lines	43 45
Sundries	18 85
	$7,304 41

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The *net* expenditure for construction of sewers to Sept. 30, 1892, inclusive, was..... $3,491,[illegible]

The *net* expenditure for maintenance of sewers to Sept. 30, 1892, inclusive, was..... $361,7[illegible]

Bills deposited with the city treasurer for collection, from July 1 to Sept. 30, 1892, inclusive, amounted to . . . . . $943 6[illegible]

As follows:

Repairing private drain in Delaine street.....	$108 81
Cleaning private connections.....	83 70
Filling cisterns, etc.....	39 20
Pumping out sewer for Everson & Liddle.....	23 87
Lowering fence.....	8 40
Puddling trench for Providence Gas Co.....	4 75
Carson engine and boiler.....	650 00
Laying drain to curbstone.....	13 02
Sewer material.....	8 25
Testing cement.....	3 60
	$943 60

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . . $336 6[illegible]

As follows:

Cleaning private connections.....	$92 25
Repairing private drain in Delaine street.....	69 16
Filling cisterns, etc.....	39 20
Lowering fence.....	8 40
Puddling trench for Providence Gas Co.....	4 75
Sewer material.....	108 25
Laying drain to curbstone.....	13 02
Testing cement.....	1 60
	$336 63

The amount of bills approved on account of sewers for t[illegible] fiscal year ending Sept. 30, 1892, inclusive, was:

FOR CONSTRUCTION.

Regular appropriation.....	$248,349 33	
Improved sewerage appropriation.....	582,450 63	
		$830,79[illegible]

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Charged as follows:

Materials	$95,185 32
Contract reservations	31,626 17
Salaries of assistant engineers	6,666 64
Sundries, improved sewerage system	2,855 83
Testing cement	2,584 36
Rent of wharf and pipe yard	1,500 00
Clerks' salaries	1,447 36
Additional catch-basins	1,369 64
Tools	129 11
Sundries	109 00
Sewer in Academy avenue, Roanoke street and Belmont avenue	4,701 59
Sewer in Amherst and Putnam streets, Atwell's avenue and Covell street	13,843 00
Sewer in B street, from Cranston to Central	1,393 59
Sewer in Baker avenue, High street and Broadway	1,762 00
Sewer in Beaufort street and Academy avenue	2,983 86
Sewer in Bellevue avenue, from Cranston street to Dexter	1,932 08
Sewer in Benefit street, from Tockwotton to the harbor wall	1,118 55
Sewer in Bowdoin, Appleton and Delaine streets	1,857 49
Sewer in Branch avenue, North Main street, Livingston avenue, etc	7,185 18
Sewer in Bucklin street, from Carter to Earl	1,140 57
Sewer in Burnett street, from Greenwich to Dexter	1,701 64
Sewer in Butler avenue, from 100 feet north of Douglas street to Pitman	1,541 25
Sewer in Butler avenue, east side, from President avenue to near Irving	1,451 85
Sewer in C street, from Lester to Central	893 23
Sewer in Cambridge street and Academy avenue	2,908 43
Sewer in Candace, Winsor and Orms streets, etc	104 77
Sewer in Carter street, from Greenwich to Bucklin	305 86
Sewer in Chalkstone avenue, from Harold street to Claremont avenue	7,442 25
Sewer in Chapin avenue, from summit to Cranston street	637 78
Sewer in Colfax and Ocean streets	3,353 39
Sewer in Common street, from Jefferson to Mulberry	341 93
Sewer in Congdon street, from Jenckes to Halsey	3,075 78
Sewer in Congress avenue, from Broad street to Hamilton	1,207 34
Sewer in Courtland and Gesler streets	2,956 42
Sewer in Cranston street, from Bridgham to Dodge	424 12
Sewer in Cranston street, from Wendell to Bridgham	4,305 88
Amount carried forward	$214,043 26

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Amount brought forward	$214,043 26
Sewer in Cranston street, from Wendell to Potter's avenue	5,357 29
Sewer in Earl street, from Greenwich to Section 9	1,207 06
Sewer in Erastus street, from Atwell's avenue to Manton	805 30
Sewer in Exchange street, from Exchange place to Westminster street	995 77
Sewer in Gallup street, from Broad to summit east of Prairie avenue	1,586 43
Sewer in Gesler street, from Vinton to Knight	788 85
Sewer in Glenham, Taylor and Public streets	1,319 76
Sewer in Greenwich, Oakland and Public streets	5,932 69
Sewer in Halsey street, from Congdon about 140 feet easterly	791 93
Sewer in Hammond street, from Gilbert to Cranston	1,459 09
Sewer in Hanover street, from Cranston to Dexter	2,271 80
Sewer in Harold street, from Valley to Chalkstone avenue	7,360 67
Sewer in Harrison street, from High to Cranston	1,827 74
Sewer in Harrison street, from Wilson to Cranston	731 81
Sewer in Hemlock street, from Valley to Woonasquatucket river	2,909 90
Sewer in Hendrick and Carleton streets	104 05
Sewer in High street, from city line to sewer in Valley	3,505 96
Sewer in Hudson street, from summit to Parade	495 37
Sewer in Hyat street, from Amherst to Manton ave	1,489 60
Sewer in Irving and Butler avenues, from Grotto to Blackstone Park	2,279 63
Sewer in Jefferson street, from Common to Orms	3 50
Sewer in Knowles street, from Pleasant to Cypress	882 74
Sewer in Kossuth street, from Putnam to Bowdoin	351 53
Sewer in Linwood avenue, from Cranston street to Dexter	4,284 17
Sewer in Mawney street, from Greenwich to Dexter	1,788 92
Sewer in Mawney and Updike streets	1,324 51
Sewer in Melrose street, from Congress avenue to Irving street	2,387 75
Sewer in Messer street, from its summit to Cranston	653 51
Sewer in Oakland street and Potters avenue	1,735 15
Sewer in Ocean street, from Public to Colfax	4,858 25
Sewer in Parade street, from Willow to Cranston	1,776 93
Sewer in Pennsylvania avenue, from Broad street to Prairie avenue	697 68
Sewer in Perkins street, from Pearl to A	6 00
Sewer in Point street, from Beacon avenue to Plain street	733 05
Amount carried forward	$278,727 68

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Amount brought forward	$278,727 68
Sewer in Potter's avenue, from Cranston street to Dexter	5,451 92
Sewer in Prairie avenue, from Public street to Colfax	5,108 35
Sewer in Public street, from Broad to Hamilton	1,914 72
Sewer in Putnam street, from Amherst to Kossuth	28 18
Sewer in Regent and Academy avenues and Dover st.	6,764 35
Sewer in Ring street, from Almy to Courtland	7 92
Sewer in Sprague street, from Greenwich to Dexter	1,593 40
Sewer in Spruce street and Brayton avenue	2,154 49
Sewer in Steuben street, from Atwell's avenue to Manton	1,760 04
Sewer in Superior street, from Cranston to Dexter	1,202 62
Sewer in Waverly street, from Cranston to Dexter	2,281 02
Sewer in West Exchange and Ridge streets	5,593 86
Sewer in Westfield street, from Harrison to Dexter	566 52
Sewer in Wilson street, from Fuller to Gilmore	349 92
Sewer in Wilson street, from Gilmore to Constitution	347 25
Sewer in Wood street, from its summit to Parade	464 53
Sewer in Delaine street, from Manton avenue to the river	9,537 93
Sewer in Delaine and Valley streets	53,288 04
Sewer in Dexter street, from Cranston to Potter's avenue	18,380 19
Sewer in Disposal Division, Section 1	5,515 21
Sewer in Elmwood Division, Section 2	28,802 75
Sewer in Elmwood Division, Section 5	163 27
Sewer in Elmwood Division, Section 6	86,684 72
Sewer in Elmwood Division, Section 7	33,225 60
Sewer in Elmwood Division, Section 8	33,445 25
Sewer in Elmwood Division, Section 9	77,480 07
Sewer in Gordon avenue, etc., Elmwood Division	50,558 74
Sewer in Hamilton, Irving and Melrose streets	56,488 10
Sewer in Humboldt and Wayland avenues and Blackstone Park	9,139 44
Iron Pipe Outlet Sewer in Disposal Division	21,485 54
Sewer in Valley and Eagle streets	9,147 15
Sewer from Valley street to Woonasquatucket river	17,188 60
Grading Ernest street from Eddy to Allen's avenue	5,947 59
	$830,799 96

For maintenance, ... $26,002 32

Charged as follows:

Cleaning basins and sewers	$10,065 49
Repairing basins and sewers	4,720 08
Cleaning and repairing old drains	3,239 46
Amount carried forward	$18,025 03

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Amount brought forward	$18,025 03
Inspection of connections	2,274 71
Barn expenses	1,607 47
Salary—superintendent	1,451 57
Horses, wagons, harnesses, etc	1,057 92
Tools	1,038 23
Cleaning private connections	185 91
Sundries	176 59
Filling cisterns, etc	112 33
Telephone lines	72 56
	$26,002 32

HIGHWAYS.

Five permits to open streets were issued durin quarter.

July 25th, the offer of John Garvey to furnish and d thirty curb corners, three feet radius, was accepted.

August 6th, a contract was executed with The New land Paving Co. and Rhode Island Concrete Co., to Union street, from Washington to Westminister.

August 10th, the offer of John E. Collins, of Wes R. I., to furnish and deliver one hundred thousand g paving blocks, was accepted.

August 10th, curbing bills aggregating $31,758.4 ported as unpaid by the City Treasurer, were with and forwarded to the Assessors of Taxes for asses against the property.

August 11th, the offer of New England Steam Bric to furnish and deliver in this city about thirty-two tho paving bricks, for Snow street, from Weybosset to Cl was accepted.

August 17th, the offer of E. D. Smith & Sons asphalt paving in Atwell's avenue, over the railroad b was accepted.

September 29th, the offer of Gates Iron Works to f a No. 3 Portable Gates Breaker with engine and complete, delivered in this city, was accepted. Am $3,000.00.

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During the quarter the following work was completed:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.			
Jan.	15,	1891,	*Ashburton street, from Charles to Tremont.*
May	21,	"	*Kinsley avenue, from Gaspee street to Eagle.*
Sept.	17,	"	*Irving avenue, from Butler to Grotto.*
Oct.	15,	"	*Belmont avenue, from Claremont to Academy.*
"	"	"	*Claremont avenue, from Roanoke street to Chalkstone avenue.*
"	"	"	*Charles street, from Branch avenue to Ledge street.*
Nov.	19,	"	*Waverly street, from Cranston to Dexter.*
Dec.	17,	"	*Branch avenue, from Langdon street to Douglas avenue.*
Feb.	18,	1892,	*Sheldon street, from Benefit to Brook.*
April	21,	"	*Regent avenue, from Academy to Harold street.*
May	19,	"	*Manton avenue, from Erastus street to Atwell's avenue*
"	"	"	*Colfax street, from Plain to Broad.*
"	"	"	*Congdon street, from Halsey to Jenckes.*
"	"	"	*Gallup street, from Prairie avenue to Broad street.*
"	"	"	*Hemlock street, from Valley to Woonasquatucket river.*
"	"	"	*Irving avenue, from Arlington to Taber.*
"	"	"	*Ives street, from Power to Pitman.*
"	"	"	*Miner street, from Oxford to Fruit.*
"	"	"	*Quaid street, from Charles to first angle in said Quaid street.*
"	"	"	*Harris avenue, from Broadway to Atwell's avenue.*
Sept.	15,	"	*Admiral street, from Whipple to Charles.*

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To be Built.

No. of resolution.	Date of approval.	
655.	Oct. 28, 1890,	*Kinsley avenue, from Gaspee street to Hemlock.*
531.	Sept. 7, 1892,	*Broad street, from the railroad bridge to the city line.*

To be Brought to Grade.

Date of order.	
June 23, 1891,	*Elmwood avenue, from Roger Williams to the bridge over tracks of the N. Y. P. & B. R. R. Co.*

To be Paved with Granite Blocks.

No. of resolution.	Date of approval.	
530.	Sept. 9, 1891,	*Cranston street, from near Winter to 140 feet south of Waverly street.*
613.	" 30, "	*Broad street, from Dorrance to Chestnut.*
823.	Jan. 2, 1892,	*Tockwotton street, from Ives to Gano.*
317.	June 8, "	*High street, from Cranston to Knight.*
358.	July 1, "	*Brook street, from Wickenden to India.*
410.	" " "	*Pettis street, from Printery to Nichols.*
449.	Aug. 2, "	*Atwell's avenue, from Knight street to Harris avenue.*

To be Paved with Granite Blocks and Bricks.

No. of resolution.	Date of approval.	
463.	August 2, 1892,	*Snow street, from Westminster to Weybosset.*

To be Paved with Granite Blocks and Cobble Stones.

554.	Sept. 16, 1892,	*North Main and Benefit streets at Constitution Hill.*

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To Concrete Sidewalks.

No. of resolution.	Date of approval.	
401.	July. 1, 1892,	*Wayne street, from Douglas avenue to Candace street.*
520.	Sept. 7, "	*Young Orchard avenue, from Cooke street to Governor.*
530.	" " "	*Pettis street, from Printery to Nichols.*

To Reset Curbstones.

409. July 1, 1892, *Pettis street, from Printery to Nichols.*

To Macadamize, Reset Curb and Concrete Gutters.

417. July 1, 1892, *Lester street, from Pearl to Bridgham.*

460. August 2, " *Maple street, from Prince to Beacon avenue.*

To Take Possession and Remove Obstructions.

Date of order.	
August 1, 1892,	*Colfax street, from Prairie avenue to Broad street.*

To Remove Urinal.

Sept. 29, 1892, *Burges Square.*

The following work was in progress September 30, 1892, viz.:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
Nov. 20, 1890,	*Chalkstone avenue, from Mount Pleasant to Academy:*—Curbing set and gutters paved.
April 21, 1892,	*Cambridge street, from Academy avenue to Sears:*—Roadway to be built.

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Date of order.

May 19, 1892, *Carleton street, from Yale avenue Beaufort street:*—Roadway to be built.

Sept. 15, " *Linwood avenue, from Cranston st to Dexter:*—In process.

To be Brought to Grade.

No. of resolution. Date of approval.

790. Dec. 22, 1891, *Charles, Admiral and Orie streets:*—Nearly completed.

797. " " " *Ernest street, from Eddy to Al avenue:*—In process.

461. Aug. 2, 1892, *Richardson street, from Pr avenue to Plain street:*—N completed.

To Take Possession, Remove Obstructions and Ge

Date of order.

June 2, 1892, *Bucklin street, from Daboll to Crom* In process.

To be Paved with Granite Blocks.

No. of resolution. Date of approval.

462. Aug. 2, 1892, *Fountain street, from Aborn to L* Nearly completed.

To be Paved with Granite Blocks and Macadamiz

467. Aug. 2, 1892, *Charles, Oriental, and Ad streets:*—Nearly completed.

To be Built.

532. Sept. 7, 1892, *Prairie avenue, from Public str Logan avenue:*—Two-thirds pleted.

553, " 16, " *Smith street, from Ruggles to I avenue:*—In process.

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The following work ordered by the board of aldermen and city council, had not commenced Sept. 30, 1892, namely:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
Sept. 15, 1892,	*Arnold street, from Brook to Thayer.*
" " "	*Hyat street, from Kossuth to Manton avenue.*
" " "	*Pope street, from Manton avenue to Amherst street.*
" " "	*Lexington avenue, from Melrose street to Hamilton.*

TO TAKE POSSESSION AND REMOVE OBSTRUCTIONS.

Nov. 5, 1891, *Butler avenue, from Irving to the city line.*

TO RESET CURBING.

June 30, 1892, *Parade street, between Cranston and High.*

TO PUT IN GOOD CONDITION.

Aug. 1, 1892, *Opper street, from Nahant to Branch avenue.*

TO MACADAMIZE OR ASPHALT ROADWAY.

No. of resolution.	Date of approval.	
821.	Jan. 2, 1892,	*North Burial Ground, from entrance to North Main street.*

TO GRADE AND PUT IN GOOD CONDITION.

590. Sept. 20, 1892, *Butler avenue, from its southerly terminus to North street.*

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To be Paved with Granite Blocks.

No. of resolution.	Date of approval.	
551.	Sept. 16, 1892,	*Broad street, from Chestnut to Pen*
552.	" " "	*Richmond street, from Broad to Shi*
555.	" " "	*Pike street, from Brook to Sou Main.*
556.	" " "	*Benefit street, from Wickenden India.*
611.	" 22, "	*High street, from Barton to Olne ville square.*

To be Paved with Granite Blocks and Bricks.

609. Sept. 22, 1892, *Aborn street, from Westminster Sabin.*

To be Paved with Bricks.

610. Sept. 22, 1892, *Eagle street, from Harris avenue Kinsley.*

Bills approved on account of highways from July 1 to Sept. 30, 1892, inclusive, amounted to:

Regular appropriation	$35,117 65	
Special appropriation	145,261 14	
		$180,378

Classified as follows:

Cleaning streets	$14,481 75
Repairs on unpaved streets	7,340 14
Tools, implements, etc.	4,306 78
Barn expenses	1,390 16
Crushed stone—material and labor	1,130 30
Blacksmith and wheelwright shop	1,039 93
Repairs on paved streets	952 04
Sundries	868 00
Salaries—superintendent and clerks	757 28
Amount carried forward	$32,266 38

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Amount brought forward	$32,266 38	
Steam rollers, repairs and supplies	519 34	
Horses, wagons, harnesses, etc.	419 10	
Labor on materials	276 23	
Repairs on stone crushers	228 77	
Watering streets	174 16	
Watchman at city yard	97 65	
Telephone lines	43 45	
Screening gravel	3 65	
		$34,028 73

NEW WORK—BUILDING AND REBUILDING STREETS, ETC., SIDEWALKS CURBED AND GUTTERS PAVED.

America street, from Asia to Europe	$ 9 20	
Ashburton street, from Charles to Tremont	679 74	
Belmont avenue, from Claremont to Academy	3,276 87	
Branch avenue, from Langdon street to Douglas avenue	4,192 36	
Cambridge street, from Academy avenue to Sears	1,731 10	
Carleton street, from Yale avenue to Beaufort street	1,987 12	
Charles street, from Branch avenue to Ledge street	2,196 29	
Claremont avenue, from Roanoke street to Chalkstone avenue	374 25	
Colfax street, from Plain to Broad	4,974 76	
Congdon street, from Halsey to Jenckes	4,080 60	
Delhi street, from Chalkstone avenue to Webster street	43 92	
Durfee street, from Hammond to Dexter	276 72	
Gallup street, from Prairie avenue to Broad street	1,878 35	
Harriet street, from Potter's avenue to Sayles street	131 13	
Harris avenue, from Broadway to Atwell's avenue	8,312 61	
Hemlock street, from Valley to Woonasquatucket river	2,597 67	
Irving avenue, from Arlington to Taber	1,691 66	
Irving avenue, from Butler to Grotto	1,876 08	
Ives street, from Power to Pitman	2,068 72	
Linwood avenue, from Cranston street to Dexter	2,019 58	
Manton avenue, from Erastus street to Atwell's avenue	5,121 16	
Miner street, from Oxford to Fruit	1,039 19	
Quaid street, from Charles to first angle in said Quaid street	542 84	
Regent avenue, from Academy to Harold street	3,362 16	
Sheldon street, from Benefit to Brook	766 59	
Waverly street, from Cranston to Dexter	776 67	
		56,007 34
Amount carried forward		$90,036 07

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Amount brought forward.....		$94,[illegible]

PAVE WITH GRANITE BLOCKS.

Atwell's avenue, from Knight street to Harris avenue.....	$4,560 74	
Broad street, from Dorrance to Chestnut.....	4,675 90	
Brook street, from Wickenden to India.....	7,888 84	
Cranston street, from 30 feet south of Winter to 140 feet south of Waverly.....	7,084 24	
Fountain street, from Aborn to Dean.....	8,507 70	
High street, from Broad to Cranston.....	2,827 87	
High street, from Cranston to Knight.....	6,546 31	
Pettis street, from Printery to Nichols.....	1,222 42	
Tockwotton street, from Ives to Gano.....	5,009 00	
		48,[illegible]

PAVE WITH GRANITE BLOCKS AND MACADAMIZE.

Charles, Admiral and Oriental streets.....		12,[illegible]

PAVE WITH GRANITE BLOCKS AND BRICKS.

Snow street, from Westminster to Weybosset.....		2,[illegible]

PAVE WITH GRANITE BLOCKS AND COBBLE.

North Main and Benefit streets, at Constitution Hill.		9[illegible]

TO BE BUILT.

Kinsley avenue, from Gaspee street to Hemlock.....	$6,491 92	
Kinsley avenue, from Hemlock street to Eagle.....	147 01	
		6,6[illegible]

BUILD ROADWAY.

Broad street, from the railroad bridge to the city line	$3,695 00	
Prairie avenue, from Public street to Logan avenue	1,620 63	
		5,[illegible]

BUILD ROADWAY AND CONCRETE GUTTERS.

Maple street, from Prince to Beacon avenue.....		

TO BE BROUGHT TO GRADE.

Charles, Admiral and Oriental streets.....	$5,475 28	
Richardson street, from Prairie avenue to Plain st.	3,812 21	
Wayne street, from Douglas avenue to Candace street.....	10 00	[illegible]
Amount carried forward.		$17[illegible]

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Amount brought forward.....	$175,905 91

MACADAMIZE.

ith street, from Ruggles to River avenue.....	807 72

SIDEWALKS CURBED AND CONCRETED FOR DRIVEWAY.

alkstone avenue, adjoining police station No. 2, stable.....	15 07

SIDEWALKS CONCRETED.

alkstone avenue, adjoining second police station	38 30

TAKE POSSESSION, REMOVE OBSTRUCTIONS AND GRADE.

ucklin street, from Daboll to Cromwell.....	1,035 55

MACADAMIZE ROADWAY, RESET CURBING AND CONCRETE GUTTERS.

Lester street, from Pearl to Bridgham.....	2,576 24
	$180,378 79

Bills deposited with the city treasurer for collection, from July 1 to Sept. 30, 1892, inclusive, amounted to $26,834 25

As follows:

Union Railroad Co., for granite blocks, etc.....	$25,985 37
Labor and materials.....	627 85
Street sweepings.....	115 00
Manure from barn.....	61 00
Old scrap iron.....	41 53
Chopping block.....	2 00
Rolling tennis court.....	1 50
	$26,834 25

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $984 32

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As follows:

Labor and materials	$733 29	
Street sweepings	115 00	
Manure from barn	61 00	
Old scrap iron	41 53	
Removing trees	30 00	
Chopping block	2 00	
Rolling tennis court	1 50	
	$984 32	

The amount of bills approved on account of highways for the fiscal year ending Sept. 30, 1892, was as follows:

Regular appropriation	$160,344 19	
Special appropriation	405,806 83	
		$566,151

Charged as follows:

Cleaning streets	$45,824 78	
Repairs on unpaved streets	42,397 79	
Crushed stone—material and labor	15,511 31	
Screening gravel	9,371 69	
Repairs on paved streets	7,862 64	
Barn expenses	7,379 59	
Tools, implements, etc	7,124 56	
Blacksmith and wheelwright shop	2,994 89	
Stone—paving and crosswalk	2,876 37	
Salaries — superintendent and clerks	2,775 53	
Horses, wagons, harnesses, etc	2,093 30	
Removing snow and ice	1,959 37	
Sundries	1,756 89	
Steam rollers, repairs and supplies	1,709 81	
Repairs on stone crushers	863 35	
Contract reservations	611 00	
Watchman at city yard	325 50	
Watering streets	322 02	
Labor on materials	276 23	
Fencing streets—material and labor	145 07	
Office expenses—city yard	64 24	
Telephone lines	63 46	
		154,309

NEW WORK.—BUILDING AND REBUILDING STREETS, ETC., SIDEWALKS CURBED AND GUTTERS PAVED.

Acorn street, from Kinsley avenue to Harris	$991 64	
Ambrose street, from Chalkstone avenue to Webster street	439 61	
Amounts carried forward	$1,431 25	$154,30

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Amounts brought forward	$1,431 25	$154,309 39
America street, from Asia to Europe	97 62	
Ashburton street, from Charles to Tremont	6,011 76	
Baker street, from Broad to Eddy	3,166 67	
Balaklava street, from Douglas avenue to Pekin street	1,147 20	
Belmont avenue, from Claremont to Academy	3,957 30	
Bowdoin street, from Appleton to Kossuth	1,382 11	
Branch avenue, from Langdon street to Douglas avenue	12,094 30	
Bucklin street, from Hawthorne to Carter	896 30	
Burnett street, from Bucklin to Dexter	2,090 64	
Calder street, from Potter's avenue to land of New York, Providence and Boston Railroad Co	2,349 00	
Cambridge street, from Academy avenue to Sears	1,822 67	
Carleton street, from Yale avenue to Beaufort street	2,575 77	
Chalkstone avenue, from Mt. Pleasant to Academy	3,217 21	
Chalkstone avenue, from River to Ruggles street	3,694 27	
Charles street, from Branch avenue to Ledge street	6,208 75	
Claremont avenue, from Roanoke street to Chalkstone avenue	2,067 44	
Colfax street, from Plain to Broad	4,974 76	
Congdon street, from Halsey to Jenckes	4,080 60	
Dart street, from McKenna to West River	927 43	
Delhi street, from Chalkstone avenue to Webster street	1,379 44	
Dexter avenue, from Broad street to Lockwood	678 18	
Douglas avenue, from Admiral street to Branch avenue	16,968 81	
Durfee street, from Hammond to Dexter	982 81	
Earl street, from Greenwich to line of New York, Providence and Boston Railroad	1,448 09	
East Manning street, from Gano to Wayland	1,421 61	
Eighth street, from Highland avenue to Pawtucket	101 77	
Ellery street, from Willow to Chapin avenue	1,083 65	
Ford street, from end of curbing now set to Dexter	394 15	
Gallup street, from Prairie avenue to Broad street	1,878 35	
Gaspee street, from Smith southerly to second angle in Gaspee	1,070 50	
Hanover street, from Dexter westerly to present end of curb	2,935 51	
Harriet street, from Potter's avenue to Sayles street	966 70	
Harris avenue, from Broadway to Atwell's avenue	8,312 61	
Hemlock street, from Valley to Woonasquatucket river	2,678 58	
Hudson street, from Messer to Ellery	1,319 90	
Hyat street, from Amherst to Kossuth	208 93	
Irving avenue, from Arlington to Taber	1,724 66	
Irving avenue, from Butler to Grotto	1,909 33	
Amounts carried forward	$111,656 63	$154,309 39

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Amounts brought forward	$111,656 63	$154,309 3
Ives street, from Power to Pitman	2,131 89	
Linwood avenue, from Cranston street to Dexter	2,019 58	
Madison street, from Potter's avenue to near land of New York, Providence and Boston Railroad Company	2,022 03	
Manton avenue, from Erastus street to Atwell's avenue	6,359 46	
Miner street, from Oxford to Fruit	1,075 84	
Plenty street, from Broad to Greenwich	299 12	
Quaid street, from Charles to first angle in said Quaid street	560 19	
Regent avenue, from Academy to Harold street	3,712 06	
River avenue, from Chalkstone to Valley street	2,660 44	
Sheldon street, from Benefit to Brook	803 16	
Staniford street, from Public to Willard avenue	1,499 03	
Waverly street, from Cranston to Dexter	4,390 03	
Western street, from Pleasant to Jenkins	264 67	
Young Orchard avenue, from Governor street to Ives	1,189 78	
		140,643 91

PAVE WITH GRANITE BLOCKS.

Atwell's avenue, from Knight street to Harris avenue	$4,560 74	
Atwell's and Manton avenues and King street	6,554 03	
Broad street, from Dorrance to Chestnut	15,363 12	
Brook street, from Wickenden to India	7,888 84	
Brook street, from Wickenden to Power	9,480 47	
Cranston street, from 30 feet south of Winter to 140 feet south of Waverly	33,331 58	
Dorrance and Weybosset streets	11,319 66	
Fountain street, from Aborn to Dean	8,507 70	
High street, from Broad to Cranston	31,697 23	
High street, from Cranston to Knight	10,988 54	
Olney street, from North Main to Prospect	3,188 44	
Pettis street, from Printery to Nichols	1,222 42	
South Main street, from Crawford to Planet	4,240 98	
Tockwotton street, from East to Ives	1,273 86	
Tockwotton street, from Ives to Gano	5,954 74	
		155,574 35

PAVE WITH GRANITE BLOCKS AND MACADAMIZE.

Charles, Admiral and Oriental streets	12,070 5

PAVE WITH GRANITE BLOCKS AND BRICKS.

Snow street, from Westminster to Weybosset	2,738
Amount carried forward	$463,356

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Amount brought forward.....		$465,356 49
PAVE WITH GRANITE BLOCKS AND COBBLE.		
North Main and Benefit streets, at Constitution hill		997 97
TO BE BUILT.		
Chapin avenue, from Messer to Norfolk.....	$1,038 02	
Greenwich street, from Bridgham to Lexington avenue.....	33,231 78	
Kinsley avenue, from Gaspee street to Hemlock....	15,982 73	
Kinsley avenue, from Hemlock street to Eagle.....	6,287 77	
		56,540 30
BUILD ROADWAY.		
Broad street, from railroad bridge to city line.....	$3,695 00	
Prairie avenue, from Public street to Logan ave...	1,620 63	
		5,315 63
BUILD ROADWAY AND CONCRETE GUTTERS.		
Maple street, from Prince to Beacon avenue.....		467 96
MACADAMIZE.		
Broadway, from Sabin street to Barton.....	$2,280 93	
Smith street, from Ruggles to River avenue.....	807 72	
		3,088 65
TO BE BROUGHT TO GRADE.		
Balch street, Pacific avenue, Hamburg avenue and Burrington street.....	$4,197 49	
Charles, Admiral and Oriental streets.....	8,700 27	
Hall street, from Northup avenue to northerly termination.....	1,276 08	
Knowles street, from Cypress to Pleasant.....	869 78	
Richardson street, from Prairie avenue to Plain st..	3,812 21	
Slater avenue, from Irving to President.....	329 81	
Summit avenue, from Fourth to Seventh.....	129 99	
Wayne street, from Douglas avenue to Candace street.....	1,812 22	
		21,127 85
TO REBUILD AND PAVE.		
Smith, Charles and Back streets.....		2,431 65
SIDEWALKS CONCRETED.		
Chalkstone avenue, adjoining second police station.	45 80	
Amounts carried forward.....	$45 80	$555,326 50

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Amounts brought forward	$45 80	$555,326 50
Greenwich and Burnett streets, adjoining estate of Elmwood club	73 35	
		119 15

GUTTERS CONCRETED.

Burnett street, from Greenwich to Bucklin		118 77

MACADAMIZE ROADWAY, RESET CURBING AND CONCRETE GUTTERS.

Lester street, from Pearl to Bridgham		2,576 24

BUILD DRIVEWAY AND CONCRETE SIDEWALK.

Chalkstone avenue, adjoining police station No. 2, stable	$33 62	
East avenue, corner of Olney street, entrance to fire station	778 26	
		811 88

TAKE POSSESSION, REMOVE OBSTRUCTIONS AND GRADE.

Bucklin street, from Daboll to Cromwell		1,035 55

TAKE POSSESSION AND REMOVE OBSTRUCTIONS.

Seymour street, from westerly termination to Ocean	$46 83	
Winslow Place, from Broad street to High	71 75	
		118 58

REPAIR ROADWAY.

Union street, from Westminster to Washington		1,778 39

TO PUT IN SAFE CONDITION.

River avenue, from Smith street to Chalkstone avenue		1, 878 68

LANDS TO BE FILLED.

Land of *heirs of Adnah Sackett et al*, on Adelaide avenue		2,388 74
		$566,153 02

SIDEWALKS AND CURBING.

The expenditures on account of sidewalks and curbing from July 1 to September 30, 1892, inclusive, amounted to $17,438 12

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Charged as follows:

Granite curbing	$14,773 47
Contract reservations	2,408 60
Concreting sidewalks	256 05
	$17,438 12

Curbing bills deposited with the city treasurer for collection, from July 1 to September 30, 1892, inclusive, amounted to $465 84

During the quarter coupons from curbing bills collected have been returned by the city treasurer and receipted for, amounting to . $3,000 93

The amount of bills approved on account of sidewalks and curbing for the fiscal year ending September 30, 1892, inclusive, was . . $64,470 04

Charged as follows:

Granite curbing	$54,228 02
Contract reservations	7,232 60
Concreting sidewalks	3,009 42
	$64,470 04

CITY ENGINEER.

Bills approved on account of city engineer's department from July 1 to Sept. 30, 1892, inclusive, amounted to $9,433 17

Charged as follows:

Salary—city engineer	$1,500 00
Salaries of assistants	7,046 35
Salaries of clerks	334 58
Horse car tickets, etc.	250 00
Supplies—drawing materials, etc.	200 63
Sundries	87 46
Instruments and repairs	11 15
Horse hire, barn expenses, etc.	3 00
	$9,433 17

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Bills deposited with the city treasurer for collection from July 1 to Sept. 30, 1892, inclusive, amounted to $19 73

As follows:

Blue prints	$13 98
Set of sewer diagrams	4 00
Hydrant map of Town of Johnston	1 75
	$19 73

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $19 73

As follows:

Blue prints	$13 98
Set of sewer diagrams	4 00
Hydrant map of Town of Johnston	1 75
	$19 73

The amount of bills approved on account of the city engineer's department for the fiscal year ending Sept. 30,1892, inclusive, was . . $51,391 91

Charged as follows:

Salary—city engineer	$5,416 67
Salaries of assistants	40,968 40
Salaries of clerks	2,548 58
Horse car tickets, etc	930 30
Supplies, drawing materials, etc	843 63
Instruments and repairs	196 90
Sundries	193 31
City engineer, for horse hire	150 00
Horse hire, barn expenses, etc	103 00
Meteorological instruments and repairs	41 12
	$51,391 91

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BRIDGES.

During the quarter the following work was ordered, namely:

No. of resolution.	Date of approval.	
466.	Aug. 2, 1892,	*Washington Bridge over Providence river*:—to build bridge and abutment walls.

August 25th, a contract was awarded to Kenneth McKay, and subsequently executed, for building abutment walls and piers for the new Washington bridge over the Providence river. Amount, $34,687.20.

September 29th, a contract was awarded to Boston Bridge Works for the iron superstructure of Washington bridge over the Providence river, and the same was subsequently executed. Amount, $17,664.18.

Bills approved on account of bridges from July 1, to Sept. 30, 1892, inclusive, amounted to $3,164 26

Charged as follows:

Barn expenses	**$76 82**
Cemetery street bridge	**85**
Central or Red bridge	**28 51**
Hemlock street bridge	**26 31**
Horses, wagons, harnesses, etc	5 00
Manton bridge	3 76
Nash Lane bridge	1 50
Park street bridge	85
Point street bridge	190 91
Rent of keeper's house, Washington bridge	30 00
Salaries—Point street bridge	1,016 25
Salaries—Red or Central bridge	489 13
Salaries—Washington bridge	523 08
Smithfield avenue bridge	3 00
Sundries	47 96
Telephone lines	55 45
Tools	105 95
Wanskuck bridge	85
Washington bridge, near India Point	481 50
Washington bridge, over Providence river	73 58
West River street bridge	3 00
	$3,164 26

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OF THE

DEPARTMENT OF PUBLIC WO

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING DECEMBER 31, 1892.

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OF THE

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OF THE

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QUARTER ENDING DECEMBER 31,

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REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., January 1, 1893.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the fortieth quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and the cost of same for the quarter ending December 31, 1892.

WATER WORKS.

In accordance with the recommendations of the Special Committee on Reduction of Taxes in the town of Cranston, in their report to the City Council, and in conformity to City Council Resolution No. 768, approved November 29, 1892, a revised schedule has been prepared increasing the rates for water takers in the town of Cranston, to date from January 1, 1893. Up to this time the water rates have always been the same for takers in adjoining towns as for those in the city. The policy pursued by the city of reducing the price for water whenever the income was sufficient to meet the cost of maintenance and interest on bonds, has inured to the benefit of all consumers, within and without the city.

The estimated income from all sources for water used in the town of Cranston, including fire hydrants, for the year 1893, is estimated at about nine thousand dollars at former rates. The increase on these rates, it is estimated, will not exceed three thousand dollars.

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The original cost of the property belonging to the city located in the town of Cranston is as follows:

Sockanosset reservoir for land	$ 14,154 00
Sockanosset reservoir for construction	211,329 33
Sockanosset reservoir for buildings, gate house, keeper's house, etc	26,711 66
Engine house, at Pettaconset	385,163 48
Temporary engine house, dwelling houses, office building, etc., at Pettaconset	21,495 00
Pettaconset pumping station for land	25,902 41
Worthington pumping engine	35,546 55
Cornish pumping engine	140,518 15
Boilers for Cornish engine	32,734 00
Stand pipe at Pettaconset	14,821 31
Corliss engine and house	100,000 00
Force main line, for land and damages	3,006 35
Leading main line, for land and damages	1,665 00
Telegraph line	1,050 00
Cast iron water pipes and specials	404,620 23
Filter basin, etc	117,574 16
Water privileges on both sides of river; mill since destroyed by fire; real estate in Pawtuxet, a part of which is in Warwick, a portion of which has since been sold; cost of whole	50,000 00
Total	$1,586,292 62

This property was acquired and the improvements made thereon, with the exception of the Corliss pumping engine, house and appurtenances, during the years 1870, 1871, and 1872. At that time prices for labor and material were greatly inflated above their present value. It was felt, however, that for the city's interest the work should no longer be delayed.

Real estate then had a fictitious value, and the prices which the city was forced to pay for land, aggregating $94,728.35, appear incredible when compared with their present selling value. The mill estate in Pawtuxet, a portion of which is in the town of Warwick, cost the city $50,000.00. The city values it to-day at $8,000, the mill having been destroyed by fire. The depreciation in values

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for farming and wood lands, for which the city paid $44,-728.35 for that which is in Cranston, and a portion of which is occupied by the pumping station, force main and reservoir, is equally marked. This is shown in the adjoining Chace farm across the river, for which the city was required to pay $9,000, and for which to-day the best offer the city has been able to obtain is $2,000.

Reference to records in this office enables a comparison to be made of prices paid for labor and material for construction of the works at that time, with that paid for similar work within a year:

Item.	Prices paid. 1869 to 1872.	Prices, 1892.
Labor, per day	$2.00 to $2.25	$1.35 to $1.50
Masons, per day	6.50	3.50
Single teams, per day	3.50 to 4.00	2.50
Double teams, per day	5.50	4.00
Cast iron waterpipe, per ton	51.50 to 72.70	24.00
Special castings, per pound	4 and 5 cents.	2½ cents.

Other minor items show the same marked difference.

It was thought practicable to construct a natural filter basin, and $117,574.16 was expended in the attempt. The nature of the soil prevented the accomplishment of the object desired, and the scheme was abandoned.

The private telegraph system has also been abandoned.

The Cornish engine was then considered the best fitted for the purpose of a pumping engine, and it was decided to adopt it. It was, of necessity, very expensive, and required heavy and costly foundations, made still more costly by the unfortunate condition of the material upon which the foundation was built. The cost, together with the engine house, boilers and stand pipe, was $573,236.74. Its value to-day cannot be based upon its original cost; it is valuable only to the extent of what it can accomplish when compared with modern engines of like capacity.

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The Corliss engine, with appurtenances and house, complete, cost $100,000.00; and it is the engine in which to-day the city places its chief reliance for pumping Pawtuxet water. The Worthington engine is of small capacity, and was used temporarily until the city could erect permanent pumping works. It has been, together with the temporary engine house, of no practical use for several years.

It is for these reasons, therefore, that the city claims that works of equal capacity could to-day be built for $590,000.00

Assuming that the city should pay taxes upon a valuation as indicated by the original cost of the works, the town of Cranston could claim with equal justice that the owner of the land that embraces the abandoned coal-mine adjacent to the reservoir, should pay upon a rate that would include all expenditures made in attempting to mine coal. Or that the present owner of Sprague Print Works should be assessed at a rate that would include the cost of mill machinery that was in use there twenty years ago, if the same should still remain upon the premises.

The city further claims that the leading and force mains should not be taxed. As stated by the Committee on Reduction of Taxes in the Town of Cranston: "It would not deprive the town of any taxable property it enjoyed before the water works were located in their town." The towns of Johnston and North Providence recognize the justice of this claim and have exempted the water pipes from taxation. The large mains are as much a part of the system of distribution as the smaller ones, and as such are as necessary to the town of Cranston as to the city. And it must be borne in mind that, if the rates were in every respect the same for the takers of the town as for those in the city, the takers in the city would have to bear an additional load over those of the town in the burdensome tax they have to pay for maintenance, and interest on the bonds for the construc

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tion of the works, and to provide for the sinking fund. This practically amounts to the takers in the town paying *less* for water than the takers in the city. That the town should impose a still further tax upon the city by taxing the large mains, thereby attaining still greater advantages, is one of the reasons why the committee claim that the city is not being dealt with fairly.

If the citizens of the town of Cranston expect to purchase water upon the same terms and conditions that is charged in this city, the town should exempt the leading and force mains and distribution pipes from taxation; and I would recommend, if they should decide to make such exemption, that the city should agree to extend pipes and supply them with water at its lowest rates. As to the other property belonging to the city in said town, if it is assessed above a a fair valuation, that could be adjusted by proper legal proceedings.

October 3d, the offer of Malden Machine Co. to furnish and set up an electric lighting plant for the Corliss Engine House, at Pettaconset, was accepted. Amount, $416.75.

November 11th, the offer of Providence Steam and Gas Pipe Co. to furnish and deliver one thousand service box lock covers, was accepted. Amount, $290.00.

December 1st, the offer of John W. Lyon to furnish and deliver the following material was accepted, namely:

1,000	1-2 inch taps,	1,000	1-2 inch stops,
125	5-8 inch taps,	60	5-8 inch stops,
50	3-4 inch taps,	30	3-4 inch stops,
50	1 inch taps,	50	1 inch stops,
50	5-8 inch plugs,	50	3-4 inch plugs,
25	1 inch plugs.		

Amount, $2,255.80.

December 1st, the offer of Thomas Phillips & Co. to furnish and deliver forty thousand pounds AAA lead pipe, various sizes, was accepted. Amount, $1,900.00.

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December 1st, the offer of L. H. Tillinghast & Co. to furnish and deliver forty thousand pounds AAA lead pipe, various sizes, was accepted. Amount, $1,900.00.

December 2d, the offer of Thomas Phillips & Co. to furnish and deliver twenty-five tons pig lead, Anchor brand, was accepted. Amount, $2,050.00.

December 7th, the offer of Fales & Jenks Machine Co. to furnish and deliver fifty fire hydrants, boxes and covers, complete, was accepted. Amount, $7,000.00.

December 13th, the offer of James E. Bradford, of Woonsocket, R. I., to build a barn at Pettaconset, was accepted. Amount, $1,125.00.

December 13th, the proposal of the Radford Pipe and Foundry Co., of Cincinnati, O., to furnish and deliver about 1,136 tons of cast iron water pipes, of various sizes, was accepted, and a contract was subsequently executed. Amount, $27,267.84.

December 28th, the proposal of Fuller Iron Works to furnish special castings, service boxes, and castings for sewers required during 1893, was accepted, and a contract was subsequently executed.

The average daily consumption of water during the last quarter was 8,045,000 gallons, and the average daily consumption for the year 1892 was 8,058,000 gallons.

Water pipes were laid during the quarter as follows:

16-INCH.

In Charles street	832.88 feet.

8-INCH.

In Frost and George streets, and Northup avenue, and in Norwood avenue, Town of Cranston	1,650.17 feet.
Amount carried forward	2,483.05 feet.

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Amount brought forward	2,483.05 feet.

6-INCH.

In Althea, Ashmont, Aurora, Bark, Berlin, Black, Bluff, Capwell, Cedar, Craven, Cromwell, Dexter, Douglas, Edith, Elton, Ford, Hanover, Hawes, Hyat, Langley, Luna, Melrose, Millard, Pope, Quade, Richardson, Rill, Ruggles, Sackett, Swan, Waverly, Western and Williams streets, California, Grand, Lexington, Linwood, Lloyd, Pavilion, Rangley and Welcome avenues, and in Howard place; in Princeton and Rye streets, Becker avenue and Rocky Hill road, Town of Johnston; and in Plain street, Standish and Washington avenues, Town of Cranston	16,384.42 feet.
Total	18,867.47 feet.

or 3.573+ miles.

Water pipes were removed during the quarter as follows:

16-INCH.

In Charles street	587.70 feet.

12-INCH.

In Charles street	246.59 feet.

8-INCH.

In Admiral street	233.50 feet.
Total	1,067.79 feet.

or .20+ miles.

Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.00 feet.
30-inch	59,893.04 feet.
24-inch	43,418.92 feet.
20-inch	9,626.59 feet.
16-inch	32,167.76 feet.
12-inch	76,735.13 feet.
10-inch	14,652.26 feet.
8-inch	211,386.32 feet.
6-inch	900,780.34 feet.
Total	1,358,744.36 feet.

or 257.338—miles.

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Twenty-one fire hydrants have been set during the quarter, one in each of the following locations:

California avenue, north side, about 400 feet east of Eddy street.
California avenue, north side, about 380 feet east of Virginia avenue.
Cromwell street, southwest corner of Bucklin street.
Dexter street, east side, 95 feet south of Hanover street.
Friendship street, northwest corner of Page street.
George street, north side, about 160 feet west of Hope street.
Hawes street, north side, about 140 feet west of Quade street.
Hyat street, easterly side, about 210 feet northeast of Manton avenue.
King street, Johnston, southerly side, about 260 feet easterly from Manton avenue.
Lexington avenue, northwest corner of Hamilton street.
Linwood avenue, north side, about 880 feet east of Cranston street.
Linwood avenue, north side, about 400 feet west of Dexter street.
Lloyd street, north side, at the entrance to Friends School.
Melrose street, east side, about 220 feet south of Sackett street.
Narragansett avenue, east side, opposite first street south of Rounds avenue.
Oriental street, east side, 355 feet south of Admiral street.
Plainfield street, Johnston, (at Thornton), north side, about 240 feet west of "Road to Mill."
Pope street, south side, about 210 feet northeast of Manton avenue.
Richardson street, northeast corner of Ocean street.
Richardson street, north side, about 260 feet east of Prairie avenue.
Thornton road, Johnston, 387 feet east of junction of Plainfield street.

The total number of fire hydrants is now fourteen hundred and ninety-three—fourteen hundred and forty-four flush and forty-nine post hydrants.

Work had not commenced laying water pipes as follows, December 3, 1892:

No. of resolution.	Date of Approval.	
820.	Dec. 17, 1892,	*Davis Park, from end of main in Regent street.*

During the quarter three hundred and thirteen water meters were set, of which number eighteen were to replace other meters. The use of six meters was discontinued.

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The following water meters were in use at the close of the quarter:

KIND.	SIZE							TOTAL.
	⅝-in	¾-in.	1-in.	1½-in.	2-in.	3-in.	4-in.	
Ball & Fitts, piston.	3,968	601	147	36	5			3,857
Ball & Fitts, rotary.			22	22	3	5	2	54
Crown	5,084	659	175	75	22	10	9	6.034
Fales, Jenks & Sons.	1	1	1					3
Thomson	792	103	23	24	3	3	1	948
Worthington.... ..	9	1			1		1	12
	8.9'4	1,365	367	157	34	18	13	

Five plumbers' licenses were issued during the quarter, making the total number ninety, all of which expired December 31, 1892.

Thirteen hundred and eighty-six permits to do plumbing work were issued during the quarter.

Three hundred and twenty-one applications for water were made during the quarter, making the total number December 31, 1892, eighteen thousand four hundred and ninety-two.

The number of new service stops opened during the quarter was three hundred and twenty-two.

The total number of service stops opened to December 31, 1892, inclusive, was seventeen thousand, seven hundred and thirty-four. The number in actual use December 31, 1892, was sixteen thousand six hundred and fifty-eight.

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The following table shows the lengths, sizes, etc., of services laid during sixteen years ending December 31, 1892:

YEARS.	Lengths of Services Laid in Feet.							Trenching.	Paving.	Taps Used.						Stops Used.						Service boxes used.
	Sizes of Pipes.						Totals.															
	½ inch.	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	1½ inch.				⅝ in.	½ in.	⅝ in.	¾ in.	1 in.	Total	⅝ in.	½ in.	⅝ in.	¾ in.	1 in.	Total	
1877....	2,776.8	8,679.3	1,884.4	248.8	114.2	7.	13,710.5	14,422.44	2,105.67	173	571	114	15	6	879	173	571	114	15	6	879	896
1878....	2,209.8	6,881.8	1,436.6	119.4	120.7	35.3	10,803.6	11,365.38	1,659 34	133	427	91	7	13	671	148	464	91	7	12	722	725
1879....	1,624.9	6,107.5	874.4	275.7	66.2	7.	8,955.7	9,421.4	1,375.52	101	335	57	17	9	519	109	380	60	17	9	575	572
1880....	2,163.6	5,951.2	1,150.	483.6	186.1	16.9	9,951.4	10,468.87	1,528.45	136	334	66	25	17	578	141	358	67	26	17	609	603
1881....	1,078.9	6,269.4	741.1	253.1	233.4	8.4	8,584.3	9,067.2	1,330.6	68	392	55	21	18	554	71	411	47	17	18	564	559
1882....	.....	8,073.8	581.3	226.4	92.	32.	9,005.5	9,481.5	1,020.	....	511	49	17	15	592	...	525	41	15	14	595	610
1883....	9.	8,075.83	761.09	143.	131.9	60.	9,180.82	9,649.5	1 284.5	1	508	61	12	14	596	2	537	44	10	13	606	629
1884....	.....	8,048.72	732.2	266.3	119.6	23.2	9,190.02	9,715.5	1,054.6	....	512	64	18	17	611	...	539	51	15	13	618	641
1885....	33.9	7,971.78	667.1	106.4	34.	28.4	8,841.58	9,283.	1,109.5	....	490	48	11	7	556	1	519	32	5	6	563	586
1886....	23.	7,764.6	699.5	115.4	98.6	25.4	8,726 5	9,213.5	965.5	....	481	64	13	12	570	....	518	49	7	11	585	609
1887....	.....	8,381.8	456.6	81.4	75.8	20.2	9,015.8	9,422.	1,164.1	....	516	47	11	11	585	...	543	32	7	10	592	612
1888....	.....	7,496.6	553.6	66.8	105.2	55.8	8,278.	8,768.	1,072.5	....	495	52	9	10	566	...	519	39	5	10	573	587
1889....	.....	9,211.9	514.2	199.	90.2	8.2	10,023.5	10,563.	1,125.5	....	546	53	18	10	627	....	579	37	12	6	634	664
1890....	.....	8,997.8	671.3	194.7	241.6	61.2	10,166.6	10,792.5	1,183.	..	549	58	17	16	640		586	42	11	15	654	680
1891....	.....	12,531.28	965.5	237.2	311.9	53.5	14,099.38	14,816.	1,445.	...	729	88	30	24	871	....	797	66	18	22	903	944
1892....	.....	14,672.27	1,284.6	152.9	248.8	.....	16,358.57	17,177.	1,945.5	...	853	103	22	17	995	....	943	75	9	17	1,044	1,093
Totals.	9,919.9	135,115.58	13,973.49	3,170.1	2,270.2	442.5	164,891.77	173,626.79	21,368.25	612	8,049	1,070	253	216	10,410	645	8,789	883	196	199	10,716	11,010

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The following table shows the lengths, sizes, etc., of services laid during the year ending December 31, 1892:

Months.	Lengths of Services Laid in Feet.								Taps Used.					Stops Used.					Separate boxes used.
	Sizes of Pipes.					Totals.	Trenching.	Paving.											
	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	1½ inch.				½ in.	⅝ in.	¾ in.	1 in.	Total.	½ in.	⅝ in.	¾ in.	1 in.	Total.	
January	325.52	55.3	28.7	6.7	.....	416.22	441.	45.	22	5	2	1	30	22	5	2	1	30	30
February	16.4	.....	.....	8.5	.....	24.9	26.5	10.	1	....	..	1	2	2	....	....	1	3	3
March	271.1	34.4	.....	15.2	.....	320.7	339.5	49.5	19	2	...	...	21	19	2	....	2	23	24
April	1,802.9	140.	32.4	.....	.....	1,975.3	2,086.5	244	112	15	4	...	131	126	10	2	...	138	146
May	1,887.92	266.8	.....	42.6	.....	2,197.32	2,272.5	209.5	103	15	..	3	121	105	14	....	3	122	123
June	1,314.	119.	8.2	16.4	.....	1,457.6	1,520.	196.	64	6	3	5	78	71	5	1	2	79	85
July	1,309.4	82.2	38.4	75.4	.....	1,505.4	1,566.	115.	78	6	4	2	90	87	6	2	2	97	99
August	1,745.4	109.3	.....	.....	.....	1,854.7	1,946.5	194.5	98	11	...	...	109	114	5	...	....	119	125
September	1,479.3	55.8	19.	.....	.....	1,554.1	1,636.	122.5	89	9	2	....	100	99	4	1	...	104	110
October	1,447.4	162.7	.....	26.2	.....	1,636.3	1,720.	260.5	92	9	1	1	103	99	7	....	1	107	110
November	1,594.63	143.2	26.2	23.4	.....	1,787.43	1,921.5	256.5	86	13	4	2	105	100	10	1	3	114	123
December	1,478.3	115.9	.....	34.4	.....	1,628.6	1,701.	242.5	89	12	2	2	105	99	7	...	2	108	115
Totals	14,672.27	1,284.6	152.9	248.8		16,358.57	17,177.	1,945.5	853	103	22	17	995	943	75	9	17	1 044	1,093

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Changes in size and location of services in 1892.

Taps and Stops.										Sizes and Lengths of Lead Pipe.										Trenching.	Paving.	Change in size only.	Change in location only.	Change in both size and location.
Taken Out.					Inserted.					Taken Out.						Inserted.								
⅜ inch.	½ inch.	⅝ inch.	¾ inch.	1 inch.	⅝ inch.	½ inch.	⅝ inch.	¾ inch.	1 inch.	½ inch.	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	1½ inch.	⅝ inch.	¾ inch.	1 inch.	1¼ inch.					
85	17	8	2	5	.....	25	16	6	8	509.8	234	35.4	32.2	58.9	20.2	395.4	212	84.4	81.5	1329	423.8	33	5	17

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The following table exhibits the number of service stops opened each month from the commencement to December 31, 1892:

MONTHS.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.
January....	.....	54	33	21	34	55	15	49	9	20	7	17	15	21	17	18	26	7	38	38	39	56
February....	.....	47	18	18	7	25	23	18	9	19	3	11	9	10	7	15	7	10	21	25	28	23
March.....	.....	38	34	63	7	45	32	60	19	46	23	39	11	28	9	24	16	14	19	23	24	28
April.....	.....	109	109	108	32	108	82	78	52	58	55	49	55	62	46	68	60	28	61	52	73	76
May.....	.....	224	206	147	162	168	136	95	80	84	66	72	78	62	62	61	70	52	74	66	114	83
June.....	.....	329	295	151	172	148	114	103	71	109	82	48	64	81	81	59	50	86	50	80	83	108
July.....	.....	333	261	127	141	158	83	80	49	75	50	77	66	76	77	83	62	89	74	67	85	105
August.....	.....	224	209	123	83	94	91	51	51	39	58	87	69	61	87	71	49	52	56	76	95	104
September.	.....	184	147	139	101	94	80	63	44	37	60	67	93	50	70	59	74	63	64	77	98	114
October.....	.....	138	135	160	92	84	81	78	79	48	61	56	47	65	62	52	80	70	64	54	104	102
November..	.....	100	104	185	86	54	73	57	63	54	37	64	49	51	39	57	69	47	56	72	81	118
December...	56	83	45	122	60	35	55	45	47	29	40	27	56	44	46	28	49	42	53	50	88	102
Totals....	56	1,863	1,596	1,364	977	1,068	865	777	573	618	548	614	612	611	575	595	612	570	642	684	900	1,014

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The receipts for water each year since the commencement have been as follows:

Year.	Amount.	Year.	Amount.
1872	$41,003 51	1883	$283,632 89
1873	97,386 09	1884	302,368 36
1874	132,052 39	1885	313,561 21
1875	165,144 71	1886	323,084 67
1876	183,868 73	1887	339,513 60
1877	200,039 39	1888	346,731 58
1878	218,883 33	1889	377,497 97
1879	229,551 78	1890	401,140 86
1880	247,705 06	1891	404,553 84
1881	260,530 87	1892	409,421 21
1882	269,318 77		

The amount of bills approved on account of water works from October 1 to December 31, 1892, inclusive, was:

For construction and extension, . . $12,790 56

Classified as follows:

Laying water pipe	$6,348 12	
Laying service pipe	3,090 55	
Special castings	1,335 23	
Rent of wharf and pipe yard	750 00	
Taps and stops	276 32	
Barn expenses	243 38	
Labor on and carting pipe	222 20	
Wharf salaries	177 43	
Horses, wagons, harnesses, etc	126 56	
Tools	115 32	
Stop valves	55 20	
Fruit Hill reservoir, for repairs	50 25	
		$12,790 56

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For maintenance, ... $28,365 92

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$2,240 86	
Sundries	1,075 96	
Firemen	733 34	
Engineers	519 15	
Superintendence	302 29	
Corliss pumping engine and house	256 25	
Lights	142 75	
Oil, waste and packing	92 50	
Labor on fuel	88 20	
Care of grounds	67 50	
Real estate	65 25	
Barn expenses	44 49	
Cornish engine house	24 82	
Cornish pumping engine	1 89	
Worthington pumping engine	75	
		$5,656 00

SOCKANOSSET RESERVOIR.

Watchman	$138 00	
Sundries	11 85	
		149 85

HOPE PUMPING STATION.

Engineers	$581 58	
Firemen	423 20	
Lights	126 75	
Sundries	48 93	
Care of grounds	40 25	
Oil, waste and packing	34 80	
Hope pumping engine, No. 2	20 35	
Coal and wood	12 50	
Hope pumping engine, No. 1	3 75	
		1,292 11

HOPE RESERVOIR.

Watchman	$207 00	
Sundries	36 28	
		243 28
Amount carried forward		$7,341 24

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Amount brought forward		$7,341

FRUIT HILL RESERVOIR.

Watchman	$184 00	
Sundries	56 92	
		240

PIPE LINE AND SERVICE STOPS.

Repairs	$2,306 04	
Superintendence—salaries	701 26	
		3,007

METER DEPARTMENT.

Water meters	$7,218 87	
Setting and repairing meters	1,148 89	
		8,367

MISCELLANEOUS.

Town of Cranston tax	$5,603 00	
Clerks' and inspectors' salaries	2,411 76	
Prevention of defilement of the Pawtuxet	459 53	
Town of North Providence tax	400 00	
Barn expenses	179 08	
Analyses of water	101 10	
Public drinking fountains and troughs	82 89	
Sundries	70 93	
Real estate at Pawtuxet	41 50	
Pipe yard, office expenses	27 61	
Town of Lincoln tax	16 80	
Horses, wagons, harnesses, etc	15 00	
		9,40
		$28,34

The amount of expenditures from October 1 to December 31, 1892, inclusive, was . $41,156

The total expenditures to December 31, 1892, inclusive, were $7,590,546

The *net* expenditure for construction and extension from October 1 to December 31, 1892, inclusive, was..... $11,9

The *net* expenditure for construction and extension to December 31, 1892, inclusive, was.....$5,833,6

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The *net* expenditure for maintenance from October 1 to December 31, 1892, inclusive was $19,248 02

The *net* expenditure for maintenance to December 31, 1892, inclusive, was $1,099,175 99

Bills deposited with the city treasurer for collection, from October 1 to December 31, 1892, inclusive, amounted to $53,635 00

As follows:

Water	$43,524 15
Water meters	6,514 00
Setting and repairing meters	1,872 81
Rent of real estate	315 02
Examination and repairs of pipe line	209 36
Permanently closing service stops	65 00
Penalties	36 00
Old scrap iron from meter department	15 73
Plumbers' fines	5 00
Labor and materials, laying service pipes, etc	1,059 93
Repairing concrete over water connections	18 00
	$53,635 00

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . $43,200 57

As follows:

Water	$33,166 12
Water meters	6,524 00
Setting and repairing meters	2,042 26
Rent of real estate	258 36
Examination and repairs of pipe line	220 03
Permanently closing service stops	65 00
Penalties	34 00
Old scrap iron from meter department	15 73
Plumbers' fines	5 00
Labor and materials, laying service pipes, etc	861 07
Repairing concrete over water connections	9 00
	$43,200 57

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SEWERS.

During the quarter ending December 31, 1892, five hundred and thirty-three permits were issued to drain layers; four hundred and nine for new work and one hundred and twenty-four for extension and repairs of drains.

Three drain layers' licenses were issued during the quarter, making the total number forty-one, all of which expired December 31, 1892.

October 29th, the offer of Frederick E. Shaw to furnish and deliver in this city 12-inch sewer pipe and branches, at 72 1-2 per cent. off list price, was accepted.

November 2d, the offer of the New England Steam Brick Co. to furnish bricks for building that portion of the improved sewerage system ordered by resolutions Nos. 652 to 655, inclusive, series of 1892, was accepted.

November 23d, the offer of John Garvey to furnish and deliver three hundred sets granite catch-basin stones, was accepted. Amount, $7,500.00.

November 26th, the offer of James C. Goff, to furnish and deliver flagstones, was accepted. Amount, $1,610.00.

December 30th, the proposal of H. R. Horton to furnish the cement required during the year 1893, delivered on the work, was accepted, and a contract was subsequently executed.

During the quarter assessments for the cost of constructing sewers were certified to the city treasurer, as follows:

Gordon, Prairie and Logan avenues and Ocean street....	$14,062 0[illegible]
Colfax street.....	1,123 0[illegible]
Pennsylvania avenue.....	1,646 0[illegible]
Congress avenue.....	2,950 7[illegible]
Broadway.....	254 6[illegible]
High street.....	1,422 [illegible]
Hemlock street.....	2,839 [illegible]
Earl street.....	1,798 [illegible]
Amount carried forward.....	$26,096 [illegible]

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Amount brought forward	$26,096 91
Bucklin street	1,980 44
Prairie avenue	7,644 70
Gallup street	3,018 10
Colfax and Ocean streets	5,375 65
Public street	3,399 26
Ocean street	6,070 75
Amherst and Putnam sts., Atwell's avenue and Covell st.	10,203 14
Exchange street	327 32
Point street	809 56
Ring street	1,073 35
Spruce street and Brayton avenue	3,392 07
Dexter street	11,564 97
Ford street	3,522 48
Hanover street	4,151 65
Warren street	1,969 14
Harrison, Wilson and Constitution streets	2,040 22
Wilson street	548 23
Westfield street	715 45
Cranston street	3,572 65
Parade street	3,066 73
Chapin avenue	1,187 55
Hudson street	932 82
Linwood avenue	6,234 28
Bellevue avenue	4,762 87
Waverly street	4,678 97
Potter's avenue	6,545 87
Sprague street	2,695 71
Hammond street	2,198 78
Harrison street	3,487 69
Superior street	3,156 95
C street	1,458 99
Cranston street	7,755 00
Messer street	1,325 41
Wood street	983 00
Kossuth street	343 00
Steuben street	1,942 16
Cambridge street and Academy avenue	2,772 86
Putnam and Appleton streets	1,322 70
Greenwich, Oakland and Public streets	16,770 89
Section 7, Melrose street	1,362 82
Hamilton, Irving and Melrose streets	525 23
Total	$172,986 32

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Sewers built, in miles, to December 31, 1892:

ITEMS.	Kind.	Built Previous to 1892.	Built During 1892.	Total to Dec. 31, 1892.
Under regular appropriation	Brick.	21.467	4.742	[illegible]
Under regular appropriation	Pipe.	58.561	12.731	[illegible]
Under improved sewerage appropriation	Brick and Pipe.	7.368	4.038	11.[illegible]
Total miles of sewers		82.436	22.511	104.9[illegible]
Catch-basins built		2.431	471	2.9[illegible]

October 20th, contracts for the construction of the following sewers, which were subsequently executed, were awarded as follows, namely:

[The amounts given below are what are estimated will be paid the contractors for labor, and do not include cost of inspection and materials, or rock excavation.]

To John Keogh.

No. of resolution.	Date of approval.		
562.	Sept. 16, 1892,	*Chalkstone avenue, from Douglas to Candace street,*	$895 60
651.	Oct. 8, "	*Winslow street, from Broad to Weybosset,*	666 10

To George R. Newman.

564.	Sept. 16, 1892,	*Providence street, from Prairie avenue to Lockwood street,*	523 79
565.	" " "	*Somerset street, from Tanner to Prairie avenue,* . . .	554 28

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No. of resolution.	Date of approval.		
629.	Oct. 6, 1892,	*Pope street, from Amherst to Manton avenue,*	$677 20
643.	" 8, "	*Adelaide avenue, from summit to Elmwood avenue,*	1,088 80
646.	" " "	*Lavaughn street, from Atwell's avenue to Amherst street,*	912 60
650.	" " "	*Tanner street, from Pearl to Somerset,*	697 15

To Frederick E. Shaw.

563.	Sept. 16, 1892,	*Plain street, from Public to Bishop,*	999 65
628.	Oct. 6, "	*Lexington avenue, from Melrose street to Hamilton,* . .	587 48
644.	" 8, "	*Canal street, from Steeple to Market square,* . . .	11,694 65
645.	" " "	*Elmwood avenue, from Lexington to the railroad bridge,*	11,697 50
647.	" " "	*Moore and Broad streets,*	856 80
648.	" " "	*Potter's avenue, from Prairie to Ocean street,*	1,032 00
649.	" " "	*Redwing street, from Greenwich to Bucklin,*	447 60

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October 28th, contracts for the construction of sewers were awarded, as follows, namely:

To Everson & Liddle.

No. of resolution.	Date of approval.		
688.	Oct. 25, 1892,	*High street, from railroad bridge to near Broadway,* .	$462 00
727.	Nov. 17, "	*High street, from Norfolk to railroad bridge,*	231 00

To Frederick E. Shaw.

No. of resolution	Date of approval.		
685.	Oct. 25, 1892,	*Blackstone street, from Prairie avenue to Plain street,*	1,841 15
687.	" " "	*Public street, from Gordon avenue to Prairie,* . . .	428 80
689.	" " "	*Lexington avenue, from near Melrose street to Elmwood avenue,*	907 35
690.	" " "	*Princeton avenue and Broad street,*	1,613 45

October 31st, contracts for the construction of the following sewers, which were subsequently executed, were awarded as follows, namely:

To George R. Newman.

No. of resolution.	Date of approval.		
684.	Oct. 25, 1892,	*Audrey street, from Bowdoin to Delaine,*	$730 60
686.	" " "	*Diamond street, from Cranston to Superior,*	1,381 15

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Resolution.	Date of approval.		Date of completion.
Aug. 2,	1892,	*Cromwell street, from Greenwich to Dexter,*	Dec. 22, 1892.
" "	"	*Ring street, from Almy to Courtland,*	Oct. 8, 1892.
" "	"	*Salem street, from Waldo to Potter's avenue,*	Nov. 5, 1892.
Sept 7,	"	*Hendrick and Carleton streets,* . . .	Oct. 31, 1892.
" "	"	*Cypress street, from east of Ivy to Camp,*	Dec. 31, 1892.
" 16,	"	*Providence street, from Prairie avenue to Lockwood street,*	Nov. 16, 1892.
" "	"	*Somerset street, from Tanner to Prairie avenue,*	Nov. 1, 1892.
Oct. 6,	"	*Pope street, from Amherst to Manton avenue,*	Dec. 3, 1892.
" 8,	"	*Adelaide avenue, from summit west of Melrose street to Elmwood avenue,* .	Dec. 23, 1892.
" "	"	*Moore and Broad streets,*	Nov. 24, 1892.
" "	"	*Potter's avenue, from Prairie to Ocean street,*	Dec. 7, 1892.
" "	"	*Redwing street, from Greenwich to Bucklin,*	Nov. 18, 1892,

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No. of resolution.	Date of approval.		Date of completion.
650.	Oct. 8, 1892,	*Tanner street, from Pearl to Somerset,* .	Nov. 9, 1892.
685.	" 25, "	*Blackstone street, from Prairie avenue to Plain street,* . .	Dec. 12, 1892.
686.	" " "	*Diamond street, from Cranston to Superior,* . . .	Dec. 5, 1892.
687.	" " "	*Public street, from Gordon avenue to Prairie,*	Nov. 22, 1892.
688.	Oct. 25, "	*High street, from railroad bridge to near Broadway,* .	Nov. 30, 1892.
690.	" " "	*Princeton avenue and Broad street,* .	Nov. 24, 1892.
727.	Nov. 17, "	*High street, from Norfolk to railroad bridge.*	Nov. 30, 1892.
784.	Dec. 3, "	*Adelaide avenue, from Melrose street to summit east of Elmwood avenue,* .	Dec. 23, 1892.

At the close of the quarter work upon the following sewers of the improved sewerage system was in progress, namely:

No. of resolution.	Date of approval.	
276.	May 10, 1892,	*Delaine and Valley streets.*
644.	Oct. 8, "	*Canal st. from Steeple to Market sq.*

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ork upon the following lateral sewers was in progress e close of the quarter, namely:

esolution. Date of approval.		
May 9, 1892,		*Manton avenue, from near Florence street to Woonasquatucket river.*
July 1,	"	*Candace, Winsor, Orms, Valley and Smith streets.*
" "	"	*High, Norfolk, Oak and Troy streets.*
August 2,	"	*Atwell's avenue, from summit west of Covell street to Putnam.*
Sept. 16,	"	*Plain street, from Public to Bishop.*
Oct. 6,	"	*Lexington avenue, from Melrose street to Hamilton.*
" 8,	"	*Elmwood avenue, from Lexington to railroad bridge.*
" 25,	"	*Audrey street, from Bowdoin to Delaine.*
Nov. 17,	"	*Steere avenue, from Amherst street to Manton avenue.*
" 18,	"	*Public street, from Ocean to Plain.*

ork upon the following sewers, completing the work ed by the city council, had not commenced December 892, viz.:

esolution. Date of approval.		
Aug. 2, 1892,		*Hannah street, from Amsterdam to Amherst.*
Sept. 16,	"	*Chalkstone avenue, from Douglas to Candace street.*
Oct. 8,	"	*Lavaughn street, from Atwell's avenue to Amherst street.*
" "	"	*Winslow street, from Broad to Weybosset.*
" "	"	*Gaspee and Cove streets.*
" "	"	*Dorrance street, from Cove to Dyer.*
" "	"	*Promenade street, from Rathbone to Gaspee.*

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No. of resolution.	Date of approval.	
655.	Oct. 8, 1892,	*Valley street, from Eagle to Rathbone.*
689.	" 25, "	*Lexington avenue, from near Melrose street to Elmwood avenue.*
729.	Nov. 17, "	*Whipple street, from Douglas avenue to end of present sewer.*
754.	" 18, "	*Potter's avenue, from Broad street to Prairie avenue.*
764.	" " "	*Douglas street, from Gano to Butler avenue.*
785.	Dec. 3, "	*Mathewson street, from Washington to Fountain.*
786.	" " "	*Tefft street, from Atwell's avenue to West Exchange street.*

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SEWER MAINTENANCE DEPARTMENT.

The following table shows the work performed by the department cleaning sewers, basins and drains for the year 1892:

Months.	Old Work.								New Work.									Total deposit removed, cubic yards.
	Old Drains.			Sand Catchers.		Open Ditches.			Sewers.				Catch-Basins.			Trapped.		
	Number.	Length in feet.	Deposit removed, cu. yds.	Number.	Deposit removed, cu. yds.	Number.	Length in feet.	Deposit removed, cu. yds.	Number.	Length in feet.	Deposit removed, cu. yds.	Dead ends.	No. times examined.	Number times cleaned.	Deposit removed, cu. yds.	From hydrants.	By rain or snow.	
January	..	..	.....	....	.....	3	250	34.20	17	376	14.	..	1	345	347 30	.....	345	395.50
February	...	....	.....	4	8.35	1	150	57.	2	800	52 15	.....	1	371	485.60	...	371	603.10
March	2	250	6.50	1	4.15	1	350	47.40	2	50	2.30	.....	1	365	423.	.....	365	483.35
April	..	.....	.....	....	.....	3	350	100.	2	400	4.15	.....	1	365	424.12	.....	365	528.27
May	....	.....	.....	1	15.45	1	150	29.65	....	.....	.....	.....	2	219	302.90	.....	219	348.
June	...	.....	.....	..	.....	..	....	.....	49	4,900	36.50	.....	1	389	464 60	108	281	501.10
July	1	175	44.45	....	.....	...	....	.....	8	2,200	9.15	.....	1	823	1,137.55	309	514	1,191.15
August	..	.....	.....	...	.....	1	175	33.33	23	10,250	23.23	34	2	1,019	1,120 30	404	615	1,176.86
September	..	....	.....	....	.....	2	250	48.15	33	15,525	10.30	23	2	983	1,081.30	306	626	1,089.75
October	.	.....	.....	...	.....	1	175	29.65	5	200	3.	.....	1	992	989.25	424	568	971.90
November	1	200	34.40	....	.....	1	175	29.60	1	100	1.15	.....	2	757	934.65	157	600	989.80
December	....	....	.....	2	3 25	1	175	29.65	....	.....	.....	...	1	141	747.25	122	519	780.15
Totals	4	..	85 35	8	31.20	15	2,200	438 63	142	34.801	155.93	56	16	7,218	8 347 82	1,830	5,388	9,056.98

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The amount of bills approved on account of sewers fro October 1 to December 31, 1892, inclusive, was:

FOR CONSTRUCTION:

Regular appropriation	$114,241 34	
Improved sewerage appropriation	84,695 41	
		$198,936

Charged as follows:

Materials	$18,751 46	
Contract reservations	13,623 63	
Salaries of assistant engineers	2,627 94	
Clerks' salaries	1,172 93	
Sundries	739 99	
Sundries, improved sewerage system	692 27	
Testing cement	546 55	
Additional catch-basins	270 07	
Tools	6 32	
Sewer in Adelaide avenue, from Melrose street to summit east of Elmwood avenue	192 27	
Sewer in Adelaide avenue, from summit west of Melrose street to Elmwood avenue	1,225 32	
Sewer in Atwell's avenue, from summit west of Covell street to Putnam	6,231 76	
Sewer in Audrey street, from Bowdoin to Delaine	244 77	
Sewer in Bernon street, from Douglas avenue to Nolan street	1,749 76	
Sewer in Blackstone street, from Prairie avenue to Plain street	2,070 55	
Sewer in Branch avenue, North Main street, Livingston avenue and Whelden street	1,730 41	
Sewer in Bucklin street and Potter's avenue	2,243 70	
Sewer in Cambridge street and Academy avenue.	30 19	
Sewer in Candace, Winsor and Orms streets, etc	8,780 47	
Sewer in Chalkstone avenue, from Harold street to Claremont avenue	19 96	
Sewer in Common and Carroll streets	1,017 79	
Amount carried forward		$63,968

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Amount brought forward	$63,968 11
Sewer in Cromwell street, from Greenwich to Dexter	926 55
Sewer in Cypress street, from a point 235 feet east of Ivy to Camp	4,855 33
Sewer in Diamond street, from Cranston to Superior	1,441 43
Sewer in Elmwood avenue, from Lexington to railroad bridge south of Roger Williams avenue	4,204 04
Sewer in Glenham, Taylor and Public streets	1,825 01
Sewer in Hendrick and Carleton streets	2,063 69
Sewer in High, Norfolk, Oak and Troy streets	25,018 52
Sewer in High street, from Norfolk to railroad bridge	236 08
Sewer in High street, from railroad bridge to end of sewer near Broadway	521 61
Sewer in Kossuth street, from Putnam to Bowdoin	118 88
Sewer in Lexington avenue, from Melrose street to Hamilton	632 36
Sewer in Manton avenue, from near Florence street to Woonasquatucket river	4,798 82
Sewer in Mawney and Updike streets	2,983 90
Sewer in Moore and Broad streets	1,049 72
Sewer in Oxford street, from about 80 feet east of Harriet to Prairie avenue	557 06
Sewer in Plain street, from Public to Bishop	755 35
Sewer in Pope street, from Amherst to Manton avenue	1,455 87
Sewer in Potter's avenue, from Greenwich street to Hamilton	1,350 59
Sewer in Potter's avenue, from Prairie to Ocean street	1,165 91
Sewer in Princeton avenue and Broad street	1,631 57
Sewer in Providence street, from Prairie avenue to Lockwood street	532 18
Sewer in Public street, from Gordon avenue to Prairie	414 93
Sewer in Public street, from Ocean to Plain	598 18
Sewer in Putnam street, from Amherst to Kossuth	829 90
Sewer in Redwing street, from Greenwich to Bucklin	435 41
Sewer in Ring street, from Almy to Courtland	603 47
Amount carried forward	$124,974 47

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Amount brought forward	$124,974 47
Sewer in Salem street, from Waldo to Potter's avenue	965 09
Sewer in Somerset street, from Tanner to Prairie avenue	778 08
Sewer in Steere avenue, from Amherst street to Manton avenue	1,640 92
Sewer in Steuben street, from Atwell's avenue to Manton	550 46
Sewer in Superior street, from Cranston to Dexter	710 64
Sewer in Tanner street, from Pearl to Somerset	796 15
Sewer in Canal street, from Steeple to Market square	8,309 14
Sewer in Delaine and Valley streets	17,353 94
Sewer in Disposal Division, Section 1	80 30
Sewer in Elmwood Division, Section 2	21 17
Sewer in Elmwood Division, Section 6	9,301 97
Sewer in Elmwood Division, Section 8	4,824 96
Sewer in Elmwood Division, Section 9	1,303 31
Sewer in Gordon avenue, etc., Elmwood Division.	35 83
Sewer in Valley and Eagle streets	6,435 46
Sewer from Valley street to Woonasquatucket river	20,854 86
	$198,936 75

For maintenance $7,392 03

Charged as follows:

Cleaning basins and sewers	$3,110 12
Repairing basins and sewers	1,443 21
Inspection of connections	744 35
Cleaning and repairing old drains	708 92
Salary—superintendent	394 29
Barn expenses	340 78
Horses, wagons, harnesses, etc	240 34
Tools	169 64
Cleaning private connections	156 85
Filling cisterns, etc	42 97
Sundries	40 56
	$7,392 03

The *net* expenditure for construction of sewers to December 31, 1892, inclusive, was $3,689,893

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The *net* expenditure for maintenance of sewers to December 31, 1892, inclusive, was..... $368,907 32

Bills deposited with the city treasurer for collection from October 1 to December 31, 1892, inclusive, amounted to . . . $613 47

As follows:

One tubular boiler.....	$200 00
Cleaning private connections.....	99 15
Filling cisterns, etc.....	37 55
Resetting catch-basin stones.....	4 00
Sewer material.....	171 58
Laying drain to curbstone.....	53 94
Repairing concrete over sewer connections.....	47 25
	$613 47

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . $493 56

As follows:

One tubular boiler.....	$200 00
Cleaning private connections.....	95 90
Filling cisterns, etc.....	46 45
Repairing private drain in Delaine street.....	39 65
Pumping out sewer for Everson and Liddle.....	23 87
Resetting catch-basin stones.....	4 00
Laying drain to curbstone.....	53 94
Repairing concrete over sewer connections.....	27 75
Testing cement.....	2 00
	$493 56

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HIGHWAYS.

Two permits to open streets were issued during the quarter.

October 3d, the offer of New England Steam Brick Co. to furnish and deliver about one hundred and one thousand vitrified street paving brick, for paving Aborn street, was accepted. Amount, about $1,200.00.

November 15th, the offer of Crabtree & Havey, of Sullivan, Maine, to furnish and deliver thirty thousand lineal feet of granite curbing, was accepted. Amount, $18,600.00.

November 16th, the offer of John E. Collins, of Westerly, R. I., to furnish and deliver ten thousand square yards of granite paving blocks, was accepted. Amount, $15,500.00.

November 16th, the offer of William Booth, of New London, Conn., to furnish and deliver ten thousand square yards of granite paving blocks and ten thousand lineal feet of granite curbing, was accepted. Amount for paving blocks, $15,500.00, and for curbing, $6,200.00.

November 18th, the offer of John Garvey to furnish and deliver five thousand square yards granite paving blocks, was accepted. Amount, $7,750.00.

November 23d, the offer of John Garvey to furnish two hundred granite curb corners, two feet radius, and fifty granite curb corners, three feet radius, was accepted. Amount, $787.50.

November 23d, the offer of John T. Tank to furnish three thousand lineal feet fourteen-inch crosswalk stone and two thousand, five hundred feet eighteen-inch crosswalk stone, was accepted. Amount, $2,450.00.

November 26th, the offer of James C. Goff to furnish and deliver bluestone curbing for Elmwood avenue, was accepted. Amount, $2,030.00.

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During the year repairs have been made as follows:

PAVED STREETS.

CLASS No. 1.—GRANITE BLOCKS ON SAND BEDDING; JOINTS FILLED WITH SAND.

Atwell's avenue	$538 35	
Canal street	25 60	
Chestnut street	29 50	
Dyer street	19 05	
Exchange place	6 05	
Exchange street	1 50	
High street	63 98	
North Main street	89 88	
Pine street	15 10	
South Main street	75	
South Water street	40 45	
Washington street	4 35	
		$834 56

CLASS No. 5.—COBBLE STONE ON SAND FOUNDATION.

Atwell's avenue	$ 32 88	
Canal street	219 38	
Charles street	228 06	
Dorrance street	68 49	
Dyer street	55 58	
Eddy street	19 50	
Elm street	8 63	
Exchange place	85 19	
High street	20 50	
India street	63 53	
Market square	13 28	
Middle street	70	
Mill street	78 50	
Orange street	6 90	
Randall street	73 75	
Sabin street	59 85	
Smith street	904 73	
South Main street	105 29	
Steeple street	18 00	
Union street	40	
Wickenden street	88 39	
		2,151 53
Total		$2,986 09

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UNPAVED STREETS.

CLASS A.—LIGHT TRAFFIC; SAND AT SUB-GRADE; ONE LAYER BROKEN STONE, SIX INCHES THICK AFTER ROLLING.

Aborn street	$1 50
America street	50
Angell street	18 20
Arthur avenue	3 00
Asia street	2 00
Atwell's avenue	35 49
Bassett street	2 00
Beacon avenue	50
Benefit street	6 50
Borden street	1 70
Branch avenue	96 90
Bridgham street	3 75
Broad street	2,764 32
Broadway	1 28
Butler avenue	1 25
Butler street	45
Carpenter street	19 72
Charles street	75
Chestnut street	5 11
Church street	3 35
Claverick street	1 00
Clifford street	268 26
Codding street	162 88
College street	12 15
Crary street	50
Dean street	84 05
Dexter street	327 99
Dodge street	15 47
Federal street	35 55
Fountain street	5 70
Francis street	3 25
Friendship street	108 98
Gaspee street	646 49
Glenham street	20 40
Hamilton street	390 20
Hewes street	56 93
Hospital street	75
Ives street	10 40
Jackson street	155 78
Amount carried forward	$5,275 00

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Amount brought forward	$5,275 00
Knight street	16 20
Lester street	36 50
Lock street	1 55
Lockwood street	296 07
Maple street	95
Meeting street	12 05
Messer street	2 50
North Main street	42 64
Ocean street	43 53
Orms street	2 70
Page street	12 20
Parade street	9 55
Park street	12 20
Parkis avenue	2 17
Pearl street	115 52
Pike street	16 00
Pine street	724 40
Plain street	1,279 24
Pleasant street	4 80
Point street	30 31
Polk street	1 92
Potter's avenue	1 83
Potter street	16 80
Power street	18 86
Prairie avenue	139 96
Promenade street	64 48
Providence street	7 25
Public street	182 83
Reservoir avenue	2,654 32
Richmond street	24 62
Robinson street	50
Shove street	75
Smith street	2 40
Snow street	7 57
Somerset street	16 35
South street	8 94
Spring street	80
Stampers street	1 98
Stevens street	1 00
Summer street	2 83
Taylor street	13 87
Tockwotton street	190 82
Updike street	308 40
Amount carried forward	$11,605 16

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Amount brought forward	$11,605 16	
Valley street	14 03	
Washington street	10 13	
Waterloo street	33 89	
Waterman street	16 45	
West Clifford street	2 97	
West Exchange street	2 50	
West Friendship street	9 75	
Wickenden street	376 03	
Williams street	45	
Winter street	64 56	
Zone street	27 00	
		$12,163

CLASS B.—SIMILAR TO CLASS A, EXCEPT SCREENED GRAVEL USED INSTEAD OF BROKEN STONE.

Atwell's avenue	$203 12	
Beaufort street	2 40	
Bellevue avenue	285 29	
Benefit street	6 90	
Branch avenue	46 20	
Broad street	5 50	
Chalkstone avenue	789 22	
Chapin avenue	69 58	
Davis street	15 18	
Durfee street	12 31	
Eagle street	49 80	
Fremont street	1 00	
Hanover street	137 74	
Harold street	464 86	
Harvard avenue	303 05	
Hendrick street	50	
Hope street	1 45	
Melrose street	285 08	
Orms street	10 85	
Plain street	1 82	
Redwing street	8 00	
River avenue	23 50	
Transit street	84	
		2,727
Amount carried forward		$14,890

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Amount brought forward		$14,890 14
CLASS C.—HEAVY TRAFFIC; SAND AT SUB-GRADE; TWO LAYERS BROKEN STONE, EACH FIVE INCHES THICK AFTER ROLLING.		
Benefit street	$139 43	
Broadway	8 02	
Fountain street	368 27	
Gaspee street	19 53	
Greenwich street	5 25	
Lockwood street	95	
North Main street	33	
Orms street	1 67	
Pearl street	56	
West Exchange street	73	
		544 74
CLASS D.—SIMILAR TO CLASS C, EXCEPT NINE INCHES REFUSE STONE FOR FOUNDATION INSTEAD OF LOWER LAYER OF BROKEN STONE.		
Benefit street	$28 17	
North Main street	1 17	
		29 34
CLASS E.—SIMILAR TO CLASS D, EXCEPT SCREENED GRAVEL USED FOR UPPER OR WEARING LAYER.		
Benefit street		10 44
CLASS F.—LIGHT TRAFFIC; MATERIAL AFFECTED BY FROST AT SUB-GRADE; LAYER OF NINE INCHES REFUSE STONE AND FIVE INCHES BROKEN STONE; UPPER LAYER ROLLED.		
Benefit street	$ 50	
Broadway	5 00	
		5 50
CLASS H.—HEAVY TRAFFIC; MATERIAL AFFECTED BY FROST AT SUB-GRADE; LAYER OF NINE INCHES REFUSE STONE AND TWO LAYERS BROKEN STONE, EACH FIVE INCHES THICK AFTER ROLLING.		
Kinsley avenue	$ 30	
Pawtucket avenue	32 63	
		32 93
Amount carried forward		$15,513 09

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Amount brought forward		$15,513 (

CLASS J.—STREETS WITH UNSCREENED GRAVEL ROAD-BED.

A street	$6 45	
Abbott Park place	60	
Aborn street	15 77	
Acorn street	95 53	
Adelaide avenue	35	
Adie street	3 60	
Admiral street	84 40	
Almy street	1 33	
America street	50	
Angell street	33 60	
Ann street	50	
Arlington avenue	25 09	
B street	136 38	
Bacon street	794 93	
Barclay street	30	
Bark street	10 50	
Battey street	50	
Bellevue avenue	93 46	
Bernon street	11 14	
Bishop street	235 02	
Blackstone street	7 50	
Bowen treet	7 60	
Bradford street	2 16	
Branch avenue	61 50	
Bridgham street	1 50	
Brighton street	1 35	
Broad street	753 35	
Brook street	42 14	
Brown street	10 20	
Brownell street	3 45	
Bullion street	45	
Burrill street	1 50	
Burrington street	316 75	
Butler treet	1 56	
C street	130 97	
Cady street	30	
Callender street	30	
Camp street	938 66	
Canal avenue	30	
Candace street	4 62	
Amounts carried forward	$3,836 11	$15,513

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Amounts brought forward	$3,836 11	$15,513 09
Cargill street	1 00	
Carpenter street	1 13	
Carroll street	4 45	
Cemetery street	113 18	
Chalkstone avenue	6 29	
Chapel street	3 07	
Charles street	177 20	
Cherry street	65 45	
Chestnut street	2 30	
Church street	1 14	
Clifford street	3 50	
Codding street	13 25	
Comfort street	56 35	
Common street	5 78	
Congdon street	10 15	
Courtland street	2 25	
Crocker avenue	500 80	
Cross street	46 99	
Davis street	54 83	
Dexter street	111 45	
Dodge street	283 12	
Douglas avenue	160 18	
Doyle avenue	1 66	
Durfee street	1 35	
Eaton street	25 92	
Eddy street	81 00	
Elbow street	1 40	
Elizabeth street	8 78	
Elm street	11 30	
Elmwood avenue	576 94	
Fenner avenue	1,696 66	
Fenner street	27 50	
Franklin avenue	3 00	
Franklin street	5 52	
Furnace street	78 25	
Gano street	96 62	
Gesler street	55 75	
Gilmore street	42 54	
Governor street	38 10	
Greene street	31 35	
Hamilton street	357 28	
Hammond street	271 47	
Harrison street	526 94	
Amounts carried forward	$9,449 30	$15,513 09

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Amounts brought forward	$9,449 30	$15,51
Harvard avenue	521 72	
Haskins street	8 10	
Hawkins street	15 00	
Haymarket street	2 85	
Hedley street	52 44	
Hewes street	45	
Hope street	48 56	
Hopkins street	3 55	
Hospital street	8 67	
Hudson street	7 10	
Ives lane	6 15	
James street	50	
Jefferson street	177 33	
Jewett street	4 20	
Junction street	30	
Knight street	515 62	
Knowles street	111 89	
Lemon street	1 85	
Lester street	15 90	
Lock street	9 32	
Lockwood street	8 70	
Logan avenue	127 58	
Lonsdale street	4 20	
Lime street	3 77	
Link street	2 25	
Madison street	22 33	
McAvoy street	129 93	
McKenna street	169 15	
Meeting street	70	
Melrose street	279 22	
Messer street	3 60	
Middle street	1 40	
Moulton street	2 40	
Mountain street	50	
Mulberry street	161 28	
Nichols street	3 79	
North Court street	4 80	
North Davis street	4 42	
Oak street	6 35	
Oakland street	216 45	
Ocean street	345 97	
Olney street	19 01	
Orms street	38 01	
Amounts carried forward	$12,516 61	$15,51

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Amounts brought forward	$12,516 61	$15,513 09
Oxford street	1 00	
Page street	43 68	
Pallas street	4 50	
Palmer street	79 02	
Parade street	4 76	
Parsonage street	2 67	
Pennsylvania avenue	105 80	
Pettis street	206 01	
Pierce street	35 30	
Pike street	14 72	
Plain street	434 77	
Pond street	309 77	
Portland street	6 04	
Potter street	9 20	
Potter's avenue	3,212 29	
Prairie avenue	380 62	
Pratt street	2 80	
Preston street	2 80	
Printery street	21 22	
Promenade street	6 60	
Prospect street	6 50	
Reservoir avenue	3,808 83	
Ringgold street	24 13	
River avenue	15 00	
Sabin street	1 55	
Senter street	411 35	
Shove street	2 50	
Smith street	94 79	
Smithfield avenue	336 67	
Snow street	14 10	
Somerset street	82	
South street	1 67	
South Court street	6 40	
Spruce street	87 89	
Star street	90	
Stewart street	13 58	
Summer street	56 86	
Superior street	31 38	
Susan street	22 49	
Sutton street	50	
Thayer street	3 65	
Thomas street	4 85	
Tobey street	3 90	
Amounts carried forward	$22,350 49	$15,513 09

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Amounts brought forward	$22,350 49	$15,513 09
Transit street	154 30	
Union street	9 85	
Valley street	116 70	
Veazie street	15 00	
Vinton street	8 25	
Walker street	22 22	
Walling street	164 77	
Walnut street	2 70	
Warren street	1 66	
Waterman street	1 67	
Wayland avenue	6 15	
West Clifford street	2 75	
Westfield street	5 70	
West Hoyle street	4 00	
West River street	475 21	
Winsor street	1 00	
Winter street	59 67	
Woodland street	1 50	
		23,403 59
BUILDING DRIVEWAYS, ETC., IN SUNDRY STREETS,		1,877 18
Total		$40,793 86

During the quarter statements of the cost of concreting sidewalks, with ten per centum added to cover cost of assessing and collecting, were certified to the assessors of taxes, viz.

Young Orchard avenue, from Cooke street to Governor	$47 83
Pettis street, from Printery to Nichols	61 21
Wayne street, from Douglas avenue to Candace street	172 76
Total	$ 281 80

In addition to the general patching necessary to maintain the streets in good repair, the following work has been done during the year ending December 31, 1892, namely:

New streets built	41,507	lineal feet.
Curbing set	72,186	lineal feet.
Streets rebuilt	13,000	lineal feet.
Streets re-surfaced	82,975	lineal feet.
Streets graded	15,350	lineal feet.
Block pavement laid	85,124	square yards.

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pavement laid.....	4,040 square yards.
avement laid.....	1,784 square yards.
te gutters and roadways built.....	18,731 square yards.
t gutters and roadways built.....	4,088 square yards.
te sidewalks laid.....	5,002 square yards.

ring the quarter the following work was completed:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

of order.		
20,	1890,	*Chalkstone avenue, from Mount Pleasant to Academy.*
21,	1892,	*Cambridge street, from Academy avenue to Sears.*
19,	"	*Carleton street, from Yale avenue to Beaufort street.*
15,	"	*Linwood avenue, from Cranston street to Dexter.*
"	"	*Arnold street, from Brook to Thayer.*
"	"	*Hyat street, from Kossuth to Manton avenue.*

TO GRADE AND PUT IN GOOD CONDITION.

resolution.	Date of approval.		
Dec.	22,	1891,	*Charles, Admiral and Oriental streets.*
Aug.	1,	1892,	*Opper street, from Nahant to Branch avenue.*
"	2,	"	*Richardson street, from Prairie avenue to Plain street.*
Nov.	3,	"	*Wood street, from Messer to Ellery.*

TO BE PAVED WITH GRANITE BLOCKS.

Aug.	2,	1892,	*Fountain street, from Aborn to Dean.*
Sept.	16,	"	*Richmond street, from Broad to Ship.*
"	"	"	*Benefit street, from Wickenden to India.*

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To be Paved with Granite Blocks and Macadamized.

No. of resolution.	Date of approval.	
467.	Aug. 2, 1892,	*Charles, Oriental and Admiral streets.*

To be Paved with Granite Blocks and Bricks.

609.	Sept. 22, 1892,	*Aborn street, from Westminster to Sabin.*

To Macadamize or Asphalt Roadway.

821.	Jan. 2, 1892,	*North Burial Ground, from entrance to North Main street.*

To be Built.

532.	Sept. 7, 1892,	*Prairie avenue, from Public street to Logan avenue.*
553.	" 16 "	*Smith street, from Ruggles to River avenue.*
673.	Oct. 22, "	*Transit street, from Benefit to Governor.*

To Fill Pond Hole.

Date of order.	
Oct. 6, 1892,	*Lots belonging to Mrs. Arazelia G. Van Zandt, near Acorn street.*

To Take Possession and Remove Obstructions.

Nov. 17, 1892,	*Elmwood avenue, from Lexington to the railroad bridge.*

The following work was in progress December 31, 1892, viz.:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
Sept. 15, 1892,	*Pope street, from Manton avenue to Amherst street:*— curbing set and gutters paved.
" " "	*Lexington avenue, from Melrose street to Hamilton:*—curbing set and gutters paved.

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Date of order.	
Oct. 20, 1892,	*Langdon street, from Branch avenue to Sherman street:*—to be rolled.
" " "	*Mawney street, from Bucklin to Dexter:*—to be rolled and gutters concreted.
" " "	*Steere avenue, from Manton to Amherst street:*—curbing set and gutters paved.

TO BE BROUGHT TO GRADE.

No. of resolution.	Date of approval.	
797.	Dec. 22, 1891,	*Ernest street, from Eddy to Allen's avenue:*—in process.

TO TAKE POSSESSION, REMOVE OBSTRUCTIONS AND GRADE.

Date of order.	
June 2, 1892,	*Bucklin street, from Daboll to Cromwell:*—in process.

TO GRADE AND PUT IN GOOD CONDITION.

No. of resolution.	Date of approval.	
590.	Sept. 20, 1892,	*Butler avenue, from its southerly terminus to North street:*—in process.

The following work, ordered by the board of aldermen and city council, had not commenced December 31, 1892, viz:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
Oct. 20, 1892,	*Whipple street, from Admiral to Douglas avenue.*
" " "	*Douglas street, from Ives to Butler avenue.*
Nov. 17, "	*Robin street, from Regent avenue to Allston street.*
" 23, "	*Cornell street, from Regent avenue to Valley street.*

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Date of order.		
Nov. 23,	1892,	*Regent avenue from River to Cornell street.*
Dec. 15,	"	*Arlington avenue, east side, from Angell street to Irving avenue.*

TO BE PAVED WITH GRANITE BLOCKS.

No. of resolution.	Date of approval.		
551.	Sept. 16,	1892,	*Broad street, from Chestnut to Pearl.*
555.	" "	"	*Pike street, from Brook to South Main.*
611.	" 22,	"	*High street, from Barton to Olneyville square.*
642.	Oct. 8,	"	*Tockwotton street, from East to South Main.*
671.	" 22,	"	*Manton avenue, from Chaffee street to Florence.*
672.	Oct. 22,	1892,	*Point street, from Chestnut to near Beacon aveuue.*
724.	Nov. 17,	"	*Charles street, from Randall square to near Ashburton street.*

TO BE PAVED WITH BRICKS.

610.	Sept 22,	1892,	*Eagle street, from Harris avenue to Kinsley.*

TO REMOVE OBSTRUCTIONS AND RESET CURBSTONES.

Date of order.		
Oct. 20,	1892,	*Knight street, from High to Broadway.*

TO TAKE POSSESSION AND PUT IN SAFE CONDITION.

Nov. 17,	1892,	*Aleppo street, from Manton avenue to property of the Riverside Mills.*

TO TAKE POSSESSION.

Dec. 15,	1892,	*Julian street, from Amherst to Atwell's avenue.*
" "	"	*Kossuth street, from Hyat to Pope.*

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To Reset Curb and Repave Gutters.

Date of order.

Dec. 15, 1892, *Valley street, west side, from driveway near Grove street to opening in curb about 250 feet south of Delaine street.*

To Build and Curb.

No. of resolution. Date of approval.

725. Nov. 17, 1892, *Elmwood avenue, from Lexington to the railroad bridge.*

780. Dec. 3, " *Gaspee street, from Cove to Promenade.*

To Concrete Sidewalks.

855. Dec. 30, 1892, *Pitman street, north side, from Governor to Ives.*

856. " " " *East, Tockwotton and Wickenden streets, surrounding Tockwotton Park.*

Bills approved on account of highways from October 1 to December 31, 1892, inclusive, amounted to:

Regular appropriation	$62,335 12	
Special appropriation	90,497 30	
		$152,832 42

Classified as follows:

Repairs on unpaved streets	$18,666 54
Cleaning streets	12,630 28
Screening gravel	5,506 83
Tools, implements, etc	3,929 29
Barn expenses	2,366 80
Horses, wagons, harnesses, etc	971 16
Labor on materials	894 28
Repairs on paved streets	791 93
Salaries—superintendent and clerks	749 15
Blacksmith and wheelwright shop	711 50
Crushed stone—material and labor	530 15
Steam rollers—repairs and supplies	526 26
Watering streets	514 61
Amount carried forward	$48,788 78

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Amount brought forward	$48,788 78	
Repairs on stone crushers	421 96	
Sundries	230 39	
Contract reservations	165 00	
Fencing streets—material and labor	103 82	
Watchman at city yard	47 25	
Office expenses, city yard	33 87	
Stone—paving and crosswalk	12 30	
		$49,803

NEW WORK—BUILDING AND REBUILDING STREETS, ETC. SIDEWALKS CURBED AND GUTTERS PAVED.

Arnold street, from Brook to Thayer	$448 71	
Ashburton street, from Charles to Tremont	2,184 36	
Cambridge street, from Academy avenue to Sears.	892 35	
Carleton street, from Yale avenue to Beaufort street	1,669 02	
Chalkstone avenue, from Mount Pleasant to Academy	2,013 14	
Claremont avenue, from Roanoke street to Chalkstone avenue	21 40	
Colfax street, from Plain to Broad	431 28	
Congdon street, from Halsey to Jenckes	162 30	
Gallup street, from Prairie avenue to Broad street	545 87	
Harris avenue, from Broadway to Atwell's avenue.	911 93	
Hemlock street, from Valley to Woonasquatucket river	79 12	
Hyat street, from Kossuth to Manton avenue	1,272 94	
Ives street, from Power to Pitman	469 69	
Langdon street, from Branch avenue to Sherman street	1,269 06	
Lexington avenue, from Melrose street to Hamilton	685 91	
Linwood avenue, from Cranston street to Dexter.	4,602 78	
Mawney street, from Bucklin to Dexter	1,210 85	
Miner street, from Oxford to Fruit	24 41	
Pope street, from Manton avenue to Amherst street	792 26	
Sheldon street, from Benefit to Brook	7 13	
Steere avenue, from Manton to Amherst street	712 97	
Whipple street, from Admiral to Douglas avenue.	82 50	
		20,4[illegible]
Amount carried forward		$70,2[illegible]

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Amount brought forward.....		$70,293 35
PAVE WITH GRANITE BLOCKS.		
Atwell's avenue, from Knight street to Harris avenue.....	$3,572 25	
Benefit street, from Wickenden to India.....	8,716 73	
Broad street, from Dorrance to Chestnut.....	3,818 69	
Fountain street, from Aborn to Dean.....	8,151 43	
Richmond street, from Broad to Ship.....	5,661 47	
		29,920 57
PAVE WITH GRANITE BLOCKS AND MACADAMIZE.		
Charles, Admiral and Oriental streets.....		6,309 08
PAVE WITH GRANITE BLOCKS AND BRICKS.		
Aborn street, from Westminster to Sabin.....		8,676 07
PAVE WITH GRANITE BLOCKS AND COBBLE.		
North Main and Benefit streets at Constituion Hill.		1,873 79
TO BE BUILT.		
Kinsley avenue, from Gaspee street to Hemlock.		7,272 30
BUILD ROADWAY.		
Broad street, from railroad bridge to city line....	$1,215 94	
Prairie avenue, from Public street to Logan avenue.....	2,233 17	
		3,449 11
BUILD ROADWAY AND CONCRETE GUTTERS.		
Maple street, from Prince to Beacon avenue.....		19 80
TO BE BROUGHT TO GRADE.		
Butler avenue, from its southerly terminus to North street.....	$7,221 40	
Charles, Admiral and Oriental streets.....	460 82	
Richardson street, from Prairie avenue to Plain street.....	3,545 69	
Wood street, from Messer to Ellery.....	689 30	
		11,917 21
Amount carried forward.....		$139,731 28

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Amount brought forward.....	$139,731 28
MACADAMIZE.	
Smith street, from Ruggles to River avenue.....	2,573 59
TAKE POSSESSION, REMOVE OBSTRUCTIONS AND GRADE.	
Bucklin street, from Daboll to Cromwell.....	3,912 06
TO REBUILD.	
Transit street, from Benefit to Governor.....	3,695 11
MACADAMIZE OR ASPHALT ROADWAY.	
North Burial Ground, from entrance to North Main street.....	1,256 26
MACADAMIZE ROADWAY, RESET CURBING AND CONCRETE GUTTERS.	
Lester street, from Pearl to Bridgham	44 93
PUT IN GOOD CONDITION.	
Opper street, from Nahant to Branch avenue.....	1,586 06
REMOVE URINAL.	
Burgess square.....	34 13
	$152,832 42

Bills deposited with the city treasurer for collection from October 1 to December 31, 1892, inclusive, amounted to . $2,653 71

As follows:

Union Railroad Co., for granite blocks, etc....	$ 2,101 63
Labor and materials.....	456 83
Manure from barn.....	61 00
Street sweepings.....	30 00
Chopping block.....	3 00
Paving hammer.....	1 25
	$ 2,653 71

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During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . $28,689 06

As follows:

Union Railroad Co., for granite blocks, etc....	$28,087 00
Labor and materials.....	506 81
Manure from barn.....	61 00
Street sweepings.....	30 00
Chopping block.....	3 00
Paving hammer.....	1 25
	$28,689 06

SIDEWALKS AND CURBING.

The expenditures on account of sidewalks and curbing from October 1 to December 31, 1892, inclusive, amounted to $5,365 30

Charged as follows:

Granite curbing.....	$ 3,954 30
Contract reservations.....	1,411 00
	$ 5,365 30

Curbing bills deposited with the city treasurer for collection, from October 1 to December 31, inclusive, amounted to $204 11

During the quarter coupons from curbing bills collected have been returned by the city treasurer and receipted for, amounting to . $298 36

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CITY ENGINEER.

Bills approved on account of city engineer's department from October 1 to December 31, 1892, inclusive, amounted to . . . $12,675 03

Charged as follows:

Salary—city engineer	$1,500 00
Salaries of assistants	9,719 77
Salaries of clerks	730 21
Supplies—drawing materials, etc	255 20
Instruments and repairs	240 80
Horse car tickets, etc	216 00
Sundries	13 05
	$12,675 03

Bills deposited with the city treasurer for collection, from October 1 to December 31, 1892, inclusive, amounted to . . . $6 00

As follows:

Set of sewer diagrams	$4 00
Steel tapes	2 00
	$6 00

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . $6 00

As follows:

Set of sewer diagrams	$4 00
Steel tapes	2 00
	$6 00

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BRIDGES.

During the quarter the following work was ordered, namely:

No. of resolution.	Date of approval.	
641.	Oct. 8, 1892,	*City Dock*:—to purchase material and build.
830.	Dec. 20, "	*Francis street bridge over Woonasquatucket river.*
831.	" " "	*Oak street foot-bridge over railroad tracks.*
832.	" " "	*Acorn street bridge over Woonasquatucket river.*

The following work was in progress at the end of the quarter, namely:

No. of resolution.	Date of approval.	
466.	Aug. 2, 1892,	*Washington bridge over Providence river*: —to build bridge and abutment walls.

October 14th, the offer of H. Hallett for painting the iron and wood work of Central bridge, was accepted. Amount, $165.00

November 10th, the offer of Millett & Talbot to furnish and deliver in this city about eighteen hundred piles for the new city wharf was accepted and a contract subsequently executed.

November 25th, the offer of Millett & Talbot to furnish and deliver about one hundred oak piles for fenders at new city wharf was accepted.

November 25th, the offer of Millett & Talbot to furnish and deliver about six hundred and sixty thousand, four hundred and twenty-one feet of yellow pine lumber for new city wharf was accepted and a contract subsequently executed. Amount, $16,510.53.

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December 1st, the proposal of J. A. Dailey & Son for constructing the new city wharf was accepted and a contract subsequently executed. Amount, $9,648.55.

December 10th, the offer of The Congdon & Carpenter Co. to furnish the iron work for the new city wharf was accepted. Amount, $340.53.

Bills approved on account of bridges from October 1 to December 31, 1892, inclusive, amounted to $7,055 8

Charged as follows:

Barn expenses	$89 49
Branch avenue culvert	1 11
Building at city yard	3 50
Cemetery street bridge	43 83
Central or Red bridge	207 79
Crawford street bridge	1 50
Gaspee street bridge	75
Hawkins street bridge	1 09
Horses, wagons, harnesses, etc	341 00
Lumber, hardware, etc	30 65
Park street bridge	1 50
Point street bridge	309 69
Rent of keeper's house, Washington bridge	30 00
Salaries—Point street bridge	1,011 00
Salaries—Red or Central bridge	474 00
Salaries—Washington bridge	491 85
Smith street bridge	65 38
Smithfield avenue bridge	1 50
Sundries	61 51
Tar bridge—Manton avenue	4 10
Tools	125 62
Veazie street bridge	7 75
Wanskuck bridge	1 10
Washington bridge, near India Point	2,593 52
Washington bridge over Providence river—to repair	41 05
Washington bridge over Providence river—to rebuild	1,089 61
Weybosset bridge	26 00
	$7,055 89

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Bills for the expenditures for the construction of the wharf at the new city dock from October 1 to December 31, 1892, inclusive, have been approved and paid from the appropriation for contingencies to the amount of . . .	$1,683 94
Bills deposited with the city treasurer for collection from October 1 to December 31, 1892, inclusive, (for lot of old lumber from various bridges), amounted to	39 25
During the quarter coupons from bills collected (for lot of old lumber from various bridges), have been returned by the city treasurer and receipted for, amounting to	39 25

ROBERT E. SMITH,
Commissioner.

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FORTY-FIRST QUARTERLY REPORT

OF THE

DEPARTMENT OF PUBLIC W

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING MARCH 31, 18

J. A. & R. A. REID, CITY PRINTERS,
Dyer and Pine Streets.
1893.

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FORTY-FIRST QUARTERLY REPORT

OF THE

DEPARTMENT OF PUBLIC WORKS

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING MARCH 31, 1893.

J. A. & R. A. Reid, City Printers,
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REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., April 1, 1893.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the forty-first quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and the cost of same for the quarter ending March 31, 1893.

WATER WORKS.

At a town council of the town of Cranston, held February 27, 1893, it was voted to exempt from taxation the leading water mains laid in Reservoir avenue in said town, provided that the proposition made by the Commissioner of Public Works to said town, dated January 4, 1893, is approved by the city council of the City of Providence. By resolution No. 114, current series, the above-mentioned proposition was approved by the city council. Whereupon, in conformity with said proposition, the water rates for the town of Cranston were established upon the same basis as are charged in the City of Providence.

January 2nd, the offer of H. R. Horton to furnish teams required at the city pipe yard for the season of 1893, for the water and sewer departments, was accepted.

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January 10th, the offer of Coffin Valve Co., of Neponset Mass., to furnish and deliver:

20	4-inch water gates,
140	6-inch water gates,
3	12-inch water gates,
2	16-inch water gates,

was accepted. Amount, $2,765.00.

The average daily consumption of water during the la quarter was 8,967,456 gallons.

Water pipes were laid during the quarter as follows:

6-INCH.

In Rhodes and Youlden streets and Dexter court.....	1,321.81 f

or .25+ miles.

Statement of sizes and lengths of pipe laid since the co mencement of the work:

36-inch.....	10,084 00
30-inch.....	59,893 04
24-inch.....	43,418 92
20-inch.....	9,626 59
16-inch.....	32,167 76
12-inch.....	76,735 13
10-inch.....	14,652 26
8-inch.....	211,386 32
6-inch.....	902,102 15
Total.....	1,360,066 17

or 257.588 + miles.

One fire hydrant has been set during the quarter, in following location:

Rhodes street, south side, about 390 feet east of Eddy street.

The total number of fire hydrants is now fourteen hun and ninety-four: fourteen hundred and forty-five flush forty-nine post hydrants.

Work had not commenced laying water pipes, March 1893, viz.:

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No. of resolution.	Date of Approval.	
820.	Dec. 17, 1892,	*Davis Park, from end of main in Regent avenue.*

During the quarter two hundred and sixty-eight water meters were set, of which number seven were to replace other meters. The use of three meters was discontinued.

The following water meters were in use at the close of the quarter:

KIND.	SIZE.							TOTAL
	⅝-in.	¾-in.	1-in.	1½-in.	2-in.	3-in.	4-in.	
Ball & Fitts, piston	3,066	604	146	35	5			3,856
Ball & Fitts, rotary			22	21	3	5	2	53
Crown.....	5,190	658	175	75	22	10	9	6,139
Fales, Jenks & Sons		1	1					2
Neptune	28							28
Thomson.....	889	125	26	28	4	3	1	1,076
Worthington.....	9	1			1		1	12
	9,182	1,389	370	159	35	18	13	11,166

Eighty-eight plumbers' licenses were issued during the quarter, all of which expire December 31, 1893.

Nine hundred and ninety-nine permits to do plumbing work were issued during the quarter.

Seventy-one applications for water were made during the quarter, making the total number March 31, 1893, eighteen thousand five hundred and sixty-three.

The number of new service stops opened during the quarter was one hundred.

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The total number of service stops opened to March 31, 1893, inclusive, was seventeen thousand eight hundred and thirty-four. The number in actual use March 31, 1893, was sixteen thousand six hundred and sixty-one.

The amount of bills approved on account of water works from January 1 to March 31, 1893, inclusive, was:

For construction and extension, . . $10,858 32

Classified as follows:

Stop valves	$2,782 81	
Service pipes	1,911 00	
Special castings	1,546 98	
Taps and stops	1,194 23	
Cast iron water pipe	852 04	
Laying water pipe	586 35	
Horses, wagons, harnesses, etc	453 79	
Laying service pipe	374 33	
Tools	325 78	
Experimental tests of water filtration	319 05	
Wharf salaries	193 50	
Barn expenses	174 70	
Labor on and carting pipe	137 94	
Fire hydrants, boxes and covers	5 82	
		$10,858 32

For maintenance, . . . $20,838 14

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$2,671 32
Firemen	784 55
Sundries	650 46
Engineers	513 50
Lights	434 85
Superintendence	299 00
Corliss pumping engine and house	138 94
Labor on fuel	84 00
Oil, waste and packing	68 13
Barn expenses	31 22
Real estate	12 00
Amount carried forward	$5,687 97

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Amount brought forward	$5,687 97	
Care of grounds	2 40	
Worthington pumping engine	1 59	
Cornish engine house	75	
		$5,692 71

SOCKANOSSET RESERVOIR.

Watchman	$136 50	
Sundries	19 00	
		155 50

HOPE PUMPING STATION.

Engineers	$575 25	
Firemen	420 90	
Lights	110 50	
Oil, waste and packing	47 37	
Sundries	38 01	
Hope pumping engine, No. 2	3 06	
		1,195 09

HOPE RESERVOIR.

Watchman	$204 75	
Sundries	25	
		205 00

FRUIT HILL RESERVOIR.

Watchman	$182 00	
Sundries	9 74	
		191 74

PIPE LINE AND SERVICE STOPS.

Repairs	$1,406 98	
Superintendence—salaries	692 50	
		2,099 48

METER DEPARTMENT.

Water meters	$4,769 19	
Setting and repairing meters	1,686 40	
		6,455 59

MISCELLANEOUS.

Clerks' and inspectors' salaries	$2,303 29	
Thawing services, etc	1,585 72	
Prevention of defilement of the Pawtuxet	435 04	
Horses, wagons, harnesses, etc	184 03	
Barn expenses	136 54	
Analyses of water	106 25	
Amounts carried forward	$4,750 87	$15,995 11

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Amounts brought forward	$4,750 87	$15,995 11
Sundries	51 50	
Pipe yard—office expenses	40 50	
Public drinking fountains and troughs	16	
		4,843 03
		$20,838 14

The amount of expenditures from January 1 to March 31, 1893, inclusive, was . $31,696 46

The total expenditures to March 31, 1893, inclusive, were $7,622,243 40

The *net* expenditure for construction and extension from January 1 to March 31, 1893, inclusive, was	$10,287 10
The *net* expenditure for construction and extension to March 31, 1893, inclusive, was	$5,843,942 34
The *net* expenditure for maintenance from January 1 to March 31, 1893, inclusive, was	$13,141 18
The *net* expenditure for maintenance to March 31, 1893, inclusive, was	$1,112,317 17

Bills deposited with the city treasurer for collection from January 1 to March 31, 1893, inclusive, amounted to . . . $297,530 55

As follows:

Water	$289,428 92
Water meters	5,882 75
Setting and repairing meters	1,474 95
Rent of real estate	222 52
Penalties	182 00
Permanently closing service stops	50 00
Examination and repairs of pipe line	22 75
Labor and materials—laying service pipes, etc.	254 66
Manure from pipe yard barn	12 00
	$297,530 55

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . $291,268 11

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As follows:

Water	$282,813 93
Water meters	5,906 75
Setting and repairing meters	1,428 85
Rent of real estate	250 18
Penalties	186 00
Examination and repairs of pipe line	61 18
Permanently closing service stops	50 00
Labor and materials—laying service pipes, etc.	552 47
Manure from pipe yard barn	12 00
Repairing concrete over water connections	6 75
	$291,268 11

SEWERS.

During the quarter ending March 31, 1893, two hundred and eleven permits were issued to drain layers: one hundred and nineteen for new work and ninety-two for extension and repairs of drains.

Forty-eight drain layers' licenses were issued during the quarter, all of which expire December 31, 1893.

March 21st, the offer of Long Island Brick Co. to furnish and deliver one million sewer brick for lateral sewers, was accepted.

March 21st, the offer of Manchester and Hudson to furnish and deliver one million sewer brick for lateral sewers, was accepted.

During the quarter assessments for the cost of constructing sewers were certified to the city treasurer, as follows:

Irving and Butler avenues	$1,698 44
Butler avenue, east side	1,446 16
Benefit street	1,575 09
Oxford street	638 00
Oakland street and Potter's avenue	2,562 29
Burnett street	3,060 98
Melrose street	5,032 29
Mawney street	2,868 54
Redwing street	577 92
Amount carried forward	$19,459 71

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Amount brought forward	$19,459 71
Carter street	427 33
Atwell's avenue	4,219 24
Branch ave., No. Main st., Livingston ave. and Whelden st.	2,836 01
Salem street	1,718 74
Potter's avenue	1,691 80
Steere avenue	733 02
Blackstone street	2,353 85
High, Norfolk, Oak and Troy streets	7,635 81
High street	339 70
High street	719 17
Providence street	639 30
Tanner street	1,134 04
Somerset street	617 82
Plain street	1,281 53
Harrison street	1,330 13
Public street	1,538 92
Glenham, Taylor and Public streets	3,861 31
Public street	997 50
Princeton avenue and Broad street	2,338 32
Moore and Broad streets	1,463 15
Mawney and Updike streets	4,926 46
Eagle and Valley streets	2,300 32
Delaine and Valley streets	8,109 40
Harold street	6,722 08
Regent and Academy avenues, and Dover street	9,790 21
Total	$89,185 97

February 14th, contracts for the construction of the following sewers for the improved sewerage system, which were subsequently executed, were awarded as follows, namely:

[The amounts given below are what are estimated will be paid the contractors for labor, and do not include cost of inspection and mate[illegible] rock excavation.]

To Everson &

No. of resolution.	Date of approval.	
655.	Oct. 8, 189[illegible]	
654.	Oct	

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To James J. Newman.

No. of resolution.	Date of approval.		
652.	Oct. 8, 1892,	*Gaspee and Cove streets,*	$42,828 75

To Frederick E. Shaw.

653.	Oct. 8, 1892,	*Dorrance street, from Cove to Dyer,*	57,515 75

February 24th, contracts for the construction of the following sewers, which were subsequently executed, were awarded as follows, namely:

To George R. Newman.

No. of resolution.	Date of approval.		
754.	Nov. 18, 1892,	*Potter's avenue, from Broad street to Prairie avenue,*	$1,409 [illegible]
70.	Feb. 4, 1893,	*Dean and Cedar streets,*	[illegible]
72.	" " "	*Marlborough avenue, and Taylor, Glenham [illegible] Moore streets.*	[illegible]
75.	" " "	*Port[illegible] from [illegible] Broad,* . .	[illegible]
77.	" " "	*Wayland avenue, from Angell street Humboldt avenue.*	[illegible]

To Frederick E. Shaw.

729.	1892,	*Whipple street, [illegible] Douglas ave[illegible] end of present [illegible]er,*	[illegible]
		[illegible]no, East Georg[illegible] d Amy streets	[illegible]

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To Everson & Liddle.

No. of resolution.	Date of approval.				
786.	Dec.	3,	1892,	*Tefft street, from Atwell's avenue to West Exchange street,*	$735 6
73.	Feb.	4,	1893,	*Oak street, from Messer to Norfolk,*	1,016 3
74.	"	"	"	*Eddy street and Pavilion avenue,*	3,175
76.	"	"	"	*Robin street, Regent avenue and Cornell street,* .	1,538

To Franklin A. Snow.

785.	Dec.	3,	1892,	*Mathewson street, from Washington to Fountain,* . .	432

To George B. White.

764.	Nov.	18,	1892,	*Douglass street, from Gano to Butler avenue,* . . .	1,860
69.	Feb.	4,	1893,	*Angell street and Butler avenue,* .	2,792

During the quarter, the construction of the following s ers was completed, namely:

No. of resolution.	Date of approval.				Date of comple
276.	May	10,	1892,	*Delaine and Valley streets,*	Jan. 7, 18
399.	July	1,	"	*High, Norfolk, Oak and Troy streets,*	Feb. 4, 18
450.	August	2,	"	*Atwell's avenue, from summit west of Covell street to to Putnam,* . .	Jan. 5, 18

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No. of resolution.	Date of approval.				Date of completion.
563.	Sept.	16,	1892,	*Plain street, from Public to Bishop,*	Mar. 24, 1893.
628.	Oct.	6,	"	*Lexington avenue, from Melrose street to Hamilton,* . .	Jan. 3, 1893.
644.	Oct.	8,	"	*Canal street, from Steeple to Market Square,* . . .	Jan. 28, 1893.
728.	Nov.	17,	"	*Steere avenue, from from Amherst street to Manton avenue,*	Jan. 6, 1893.
755.	Nov.	18,	"	*Public street, from Ocean to Plain,* .	Mar. 24, 1893.

At the close of the quarter, work upon the following sewers of the improved sewerage system was in progress, namely:

No. of resolution.	Date of approval.			
654.	Oct.	8,	1892,	*Promenade street, from Rathbone to Gaspee.*
655.	"	"	"	*Valley street, from Eagle to Rathbone.*

Work upon the following lateral sewers was in progress at the close of the quarter, namely:

No. of resolution.	Date of approval			
265.	May	9,	1892,	*Manton avenue, from near Florence street to Woonasquatucket river.*
363.	July	1,	"	*Candace, Winsor, Orms, Valley and Smith streets.*
455.	Aug.	2,	"	*Hannah street, from Amsterdam to Amherst.*
645.	Oct.	8,	"	*Elmwood avenue, from Lexington to railroad bridge.*
646.	"	"	"	*Lavaughn street, from Atwell's avenue to Amherst street.*

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No. of resolution.	Date of approval.			
684.	Oct.	25,	1892,	*Audrey street, from Bowdoin to Delaine.*
689.	"	"	"	*Lexington avenue, from near Melrose street to Elmwood avenue.*
69.	Feb.	4,	1893,	*Angell street and Butler avenue.*
74.	"	"	"	*Eddy street and Pavilion avenue.*

Work upon the following sewers, completing the work ordered by the city council, had not commenced March 31, 1893, namely:

No. of resolution.	Date of approval.			
562.	Sept.	16,	1892,	*Chalkstone avenue, from Douglas to Candace street.*
651.	Oct.	8,	"	*Winslow street, from Broad to Weybosset.*
652.	"	"	"	*Gaspee and Cove streets.*
653.	"	"	"	*Dorrance street, from Cove to Dyer.*
729.	Nov.	17,	"	*Whipple street, from Douglas avenue to end of present sewer.*
754.	"	18,	"	*Potter's avenue, from Broad street to Prairie avenue.*
764.	"	"	"	*Douglass street, from Gano to Butler avenue.*
785.	Dec.	3,	"	*Mathewson street, from Washington to Fountain.*
786.	"	"	"	*Tefft street, from Atwell's avenue to West Exchange street.*
70.	Feb.	4,	1893,	*Dean and Cedar streets.*
71.	"	"	"	*Gano, East George and Amy streets.*
72.	"	"	"	*Marlborough avenue, Taylor, Glenham and Moore streets.*
73.	"	"	"	*Oak street, from Messer to Norfolk.*
75.	"	"	"	*Portland street, from Hayward to Broad.*

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No. of resolution.	Date of approval.			
76.	Feb.	4,	1893,	*Regent avenue and Cornell street.*
77.	"	"	"	*Wayland avenue, from Angell street to Humboldt avenue.*
138.	Mar.	21,	"	*Norfolk and Station streets, Huntington avenue, Chambers and Burrington streets.*

The amount of bills approved on account of sewers from January 1, to March 31, 1893, inclusive, was:

FOR CONSTRUCTION.

Regular appropriation	$29,637 06	
Improved sewerage appropriation	34,747 32	
		$64,384 38

Charged as follows:

Materials	$9,241 90
Contract reservations	5,416 00
Salaries of assistant engineers	2,603 25
Clerks' salaries	1,115 10
Rent of wharf and pipe yard	750 00
Sundries—improved sewerage system	655 72
Sundries	382 97
Testing cement	275 90
Additional catch-basins	58 29
Tools	1 69
Sewer in Angell street and Butler avenue	703 59
Sewer in Atwell's avenue, from summit west of Covell street to Putnam	20 02
Sewer in Audrey street, from Bowdoin to Delaine	33 95
Sewer in Blackstone street, from Prairie avenue to Plain street	20 26
Sewer in Candace, Winsor and Orms streets, etc.	1 75
Sewer in Cypress street, from a point 235 feet east of Ivy to Camp	10 50
Sewer in Eddy street and Pavilion avenue	1,107 59
Sewer in Elmwood avenue, from Lexington to railroad bridge south of Roger Williams avenue.	3,625 06
Sewer in Gano, East George and Amy streets	4 30
Sewer in Hannah street, from Amsterdam to Amherst	288 84
Sewer in High, Norfolk, Oak and Troy streets	9,249 33
Amount carried forward	$35,566 01

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Amount brought forward	$35,566 01
Sewer in Lavaughn street, from Atwell's avenue to Amherst street	60 67
Sewer in Lexington avenue, from Melrose street to Hamilton	578 65
Sewer in Manton avenue, from near Florence street to Woonasquatucket river	1,661 71
Sewer in Plain street, from Public to Bishop	302 09
Sewer in Public street, from Ocean to Plain	393 92
Sewer in Steere avenue, from Amherst street to Manton avenue	22 31
Sewer in Canal street, from Steeple to Market Square	508 88
Sewer in Delaine and Valley streets	12,433 79
Sewer in Promenade street, from Rathbone to Gaspee	7,449 66
Sewer in Valley and Eagle streets	38 56
Sewer in Valley street, from Eagle to Rathbone	3,254 23
Sewer from Valley street to Woonasquatucket river	120 39
Grading Ernest street, from Eddy to Allen's avenue	1,993 51
	$64,384 38

For maintenance, ... $6,741 19

Charged as follows:

Cleaning basins and sewers	$1,462 35
Repairing basins and sewers	1,346 96
Cleaning and repairing old drains	1,214 09
Tools	864 17
Inspection of connections	793 19
Salary—superintendent	390 00
Barn expenses	270 66
Horses, wagons, harnesses, etc	213 86
Sundries	84 71
Filling cisterns, etc	52 70
Cleaning private connections	48 50
	$6,741 19

The *net* expenditure for construction of sewers to March 31, 1893, inclusive, was $3,753,069 8

The *net* expenditure for maintenance of sewers to March 31, 1893, inclusive, was $375,502 5

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Bills deposited with the city treasurer for collection, from January 1 to March 31, 1893, inclusive, amounted to . $1,843 24

As follows:

Cleaning private connections	$ 102 00
Filling cisterns, etc	36 70
Pumping out sewer	16 25
Old manhole, frame and cover	2 29
Excavating rock on Cypress street, for Rhode Island Institution for the Deaf	1,000 00
One Carson engine and boiler	650 00
Laying drain to curbstone	31 42
Sewer materials	3 58
Testing cement	1 00
	$1,848 24

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $1,351 71

As follows:

Cleaning private connections	$ 90 75
Filling cisterns, etc	34 70
Pumping out sewer	16 25
Old manhole, frame and cover	2 29
Excavating rock on Cypress street, for Rhode Island Institution for the Deaf	1,000 00
Sewer materials	175 16
Repairing concrete over sewer connections	19 50
Laying drain to curbstone	12 06
Testing cement	1 00
	$1,351 71

HIGHWAYS.

Four permits to open streets were issued during the quarter.

February 11th, the offer of Beaton Bros. to furnish and deliver five thousand square yards of granite paving blocks was accepted.

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March 13th, the offer of O. F. Gibson, of Oneco, Conn., to furnish and deliver paving blocks was accepted.

Statements have been prepared of the cost of curbstones set, ascertained by the commissioner and certified to the board of aldermen for approval, as follows:

Ambrose street, from Chalkstone avenue to Webster street	$ 250 21
America street, from Asia to Europe	124 98
Baker street, from Broad to Eddy	1,519 63
Belmont avenue, from Claremont to Academy	1,706 87
Bowdoin street, from Appleton to Kossuth	974 04
Bucklin street, from Hawthorne to Carter	353 16
Cambridge street, from Academy avenue to Sears.	887 51
Carleton street, from Yale avenue to Beaufort street	1,623 85
Chalkstone avenue, from Mount Pleasant to Academy	1,926 19
Charles street, from Branch avenue to Ledge street	1,419 52
Claremont avenue, from Roanoke street to Chalkstone avenue	698 08
Dart street, from McKenna to West River	546 61
Durfee street, from Hammond to Dexter	605 20
Earl street, from Greenwich to line of the N. Y. P. and B. R. R	686 20
Harriet street, from Potter's avenue to Sayles street	769 59
Hyat street, from Kossuth to Manton avenue	558 55
Ives street, from Power to Pitman	1,255 15
Langdon street, from Branch avenue to Sherman street	823 47
Lexington avenue, from Melrose street to Hamilton	734 31
Linwood avenue, from Cranston street to Dexter	2,484 76
Manton avenue, from Erastus street to Atwell's avenue	1,444 51
Pope street, from Manton avenue to Amherst street	691 32
Quade street, from Charles to first angle in said Quade street	323 38
Regent avenue, from Academy to Harold street	1,815 88
Waverly street, from Cranston to Dexter	2,311 48
Amount carried forward	$26,534 45

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Amount brought forward	$26,534 45
Branch avenue, from Langdon street to Douglas avenue and from end of curb to Langdon street	5,906 01
Calder street, from Potter's avenue to land of N.Y. P. and B. R. R. Co	1,026 92
Congdon street, from Halsey to Jenckes	581 33
Dexter avenue, from Broad street to Lockwood	515 26
Ellery street, from Willow to Chapin avenue	941 52
Harris avenue, from Broadway to Atwell's avenue	4,154 30
Hemlock street, from Valley to Woonasquatucket river	1,020 95
Irving avenue, from Butler to Grotto	626 69
Irving avenue, from Arlington to Taber	630 56
Mawney street, from Bucklin to Dexter	1,019 99
Steere avenue, from Manton to Amherst street	523 53
Total	$43,481 51

During the quarter the following work was completed:

TO BE BROUGHT TO GRADE.

No. of resolution.	Date of approval.	
797.	Dec. 22, 1891,	*Ernest street, from Eddy to Allen's avenue.*

The following work was in progress March 31, 1893, viz.:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
Sept. 15, 1892,	*Pope street, from Manton avenue to Amherst street:*—curbing set and gutters paved.
" " "	*Lexington avenue, from Melrose street to Hamilton:* — curbing set and gutters paved.
Oct. 20, "	*Langdon street, from Branch avenue to Sherman street:*—to be rolled.
" " "	*Mawney street, from Bucklin to Dexter:*—to be rolled and gutters concreted.
" " "	*Steere avenue, from Manton to Amherst street:*—curbing set and gutters paved.

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To Take Possession, Remove Obstructions and Grade.

Date of order.	
June 2, 1892,	*Bucklin street, from Daboll to Cromwell:* —in process.

To Grade and Put in Good Condition.

No. of resolution.	Date of approval.	
590.	Sept. 20, 1892,	*Butler avenue, from its southerly terminus to North street:*—in process.

The following work, ordered by the board of aldermen and city council, had not commenced March 31, 1893, viz.:

Sidewalks to be Curbed and Gutters Paved.

Date of order.		
Oct. 20,	1892,	*Whipple street, from Admiral to Douglas avenue.*
" "	"	*Douglass street, from Ives to Butler avenue.*
Nov. 17,	"	*Robin street, from Regent avenue to Allston street.*
" 23,	"	*Cornell street, from Regent avenue to Valley street.*
" "	"	*Regent avenue, from River to Cornell street.*
Dec. 15,	"	*Arlington avenue, east side, from Angell street to Irving avenue.*
Feb. 16,	1893,	*Ashmont street, from Ocean to Eddy.*
" "	"	*Gardner street, from Camp to Knowles.*
" "	"	*Knowles street, from Pleasant to Cypress.*
Mar. 16,	"	*Blackstone street, from Prairie avenue to Plain street.*
" "	"	*Butler avenue, from Elton street to North.*
" "	"	*Delaine street, from Woonasquatucket river to Valley street.*

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Date of order.	
Mar. 16, 1893,	*Kossuth street, from Hyat to Pope.*
" " "	*Princeton avenue, from Greenwich street to Bucklin.*
" " "	*Salem street, from Potter's avenue to Waldo street.*
" " "	*Wood street, from Messer to Ellery.*
" " "	*Julian street, from Amherst to Atwell's avenue.*
" " "	*Livingston avenue, from North Main street to Printery.*
" " "	*Allston street, from River avenue to Cornell street.*

TO BE PAVED WITH GRANITE BLOCKS.

No. of resolution.	Date of approval.	
551.	Sept. 16, 1892,	*Broad street, from Chestnut to Pearl.*
555.	" " "	*Pike street, from Brook to South Main.*
611.	" 22, "	*High street, from Barton to Olneyville square.*
642.	Oct. 8, "	*Tockwotton street, from East to South Main.*
671.	" 22, "	*Manton avenue, from Chaffee street to Florence.*
672.	" " "	*Point street, from Chestnut to near Beacon avenue.*
724.	Nov. 17, "	*Charles street, from Randall square to near Ashburton street.*

TO BE PAVED WITH BRICKS.

610.	Sept. 22, 1892,	*Eagle street, from Harris avenue to Kinsley.*

TO REMOVE OBSTRUCTIONS AND RESET CURBSTONES.

Date of order.	
Oct. 20, 1892,	*Knight street, from High to Broadway.*

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To Take Possession and Put in Safe Condition.

Date of order.			
Nov.	17,	1892,	*Aleppo street, from Manton avenue to property of the Riverside Mills.*

To Take Possession.

Dec.	15,	1892,	*Julian street, from Amherst to Atwell's avenue.*
"	"	"	*Kossuth street, from Hyat to Pope.*
Mar.	2,	1893,	*Henderson street, from Allen's avenue to its easterly termination.*

To Reset Curb and Repave Gutters.

Date of order.			
Dec.	15,	1892,	*Valley street, west side, from driveway near Grove street to opening in curb about 250 feet south of Delaine street.*

To Build and Curb.

No. of resolution.	Date of approval.			
725.	Nov.	17,	1892,	*Elmwood avenue, from Lexington to the railroad bridge.*
780.	Dec.	3,	"	*Gaspee street, from Cove to Promenade.*

To Concrete Sidewalks.

855.	Dec.	30,	1892,	*Pitman street, north side, from Governor to Ives.*
856.	"	"	"	*East, Tockwotton and Wickenden streets surrounding Tockwotton Park.*

To Put in Good Condition.

Date of order.			
Jan.	2,	1893,	*Elmwood avenue, from old city line to new city line.*

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Bills approved on account of highways from January 1 to March 31, 1893, inclusive, amounted to:

Regular appropriation	$38,357 29	
Special appropriation	32,169 24	
		$70,526 53

Classified as follows:

Removing snow and ice	$15,250 52	
Screening gravel	8,774 05	
Barn expenses	2,536 49	
Cleaning streets	1,685 90	
Blacksmith and wheelwright shop	1,541 17	
Horses, wagons, harnesses, etc	1,520 00	
Tools, implements, etc	1,286 38	
Labor on materials	1,122 81	
Steam rollers—repairs and supplies	1,076 82	
Salaries—superintendent and clerks	741 00	
Repairs on stone crushers	740 46	
Crushed stone—material and labor	629 41	
Repairs on unpaved streets	618 38	
Watchman at city yard	189 00	
Sundries	120 49	
Repairs on paved streets	104 53	
Fencing streets—material and labor	100 00	
Office expenses, city yard	35 45	
		$38,072 86

New Work—Building and Rebuilding Streets, Etc.

Sidewalks Curbed and Gutters Paved.

Blackstone street, from Prairie avenue to Plain street	$1,121 42	
Mawney street, from Bucklin to Dexter	34 40	
Whipple street, from Admiral to Douglas avenue	414 73	
		1,570 55

Pave with Granite Blocks.

Broad street, from Chestnut to Pearl	$2,223 47	
Charles street, from Randall square to near Ashburton street	358 29	
Tockwotton street, from East to South Main	6,641 52	9,223 28
Amount carried forward		$48,866 69

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Amount brought forward.....		$48,866 00
PAVE WITH GRANITE BLOCKS AND MACADAMIZE.		
Charles, Admiral and Oriental streets.....		3,422 87
TO BE BUILT.		
Kinsley avenue, from Gaspee street to Hemlock		4,745 75
TO BUILD AND CURB.		
Elmwood avenue, from Lexington to the railroad bridge.....		3,784 00
TO BE BROUGHT TO GRADE.		
Butler avenue, from its southerly terminus to North street.....	$8,852 16	
Richardson street, from Prairie avenue to Plain street.....	605 33	
		9,457 49
TAKE POSSESSION, REMOVE OBSTRUCTIONS AND GRADE.		
Bucklin street, from Daboll to Cromwell.....		250 03
		$70,526 53

Bills deposited with the city treasurer for collection from January 1 to March 31, 1893, inclusive, amounted to . . . $558 85

As follows:

Labor and materials.....	$396 85
Street sweepings.....	100 00
Manure from barn.....	62 00
	$558 85

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $241 15

As follows:

Street sweepings.....	$100 00
Labor and materials.....	79 15
Manure from barn.....	62 00
	$241 15

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SIDEWALKS AND CURBING.

The expenditures on account of sidewalks and curbing from January 1 to March 31, 1893, inclusive, were:

For granite curbing	$941 75	
Curbing bills deposited with the city treasurer for collection, from January 1 to March 31, 1893, inclusive, amounted to . . .		$43,984 92
During the quarter, coupons from curbing bills collected have been returned by the city treasurer and receipted for, amounting to . .		$9,090 31

CITY ENGINEER.

Bills approved on account of city engineer's department, from January 1 to March 31, 1893, inclusive, amounted to $12,856 00

Charged as follows:

Salary—city engineer	$1,500 00
Salaries of assistants	9,906 75
Salaries of clerks	763 75
Horse-car tickets, etc	241 00
Instruments and repairs	222 00
Supplies—drawing materials, etc	203 69
Sundries	12 46
Meteorological instruments and repairs	3 35
Horse hire, barn expenses, etc	3 00
.	$12,856 00

Bills deposited with the city treasurer for collection, from January 1 to March 31, 1893, inclusive, amounted to $5 92

As follows:

Aluminum tape and reel	$5 60
Blue process paper	32
	$5 92

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During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $5 92

As follows:

Aluminum tape and reel	$5 60
Blue process paper	32
	$5 92

BRIDGES.

January 10th, the proposal of John T. Tank to build the abutment walls of the Acorn street bridge was accepted, and a contract was subsequently executed. Amount, $3170.00.

January 17th, the proposal of Joseph Ross, of Ipswich, Mass., to build the piers of the Francis street bridge was accepted, and a contract was subsequently executed. Amount, $21,618.10.

March 21st, the proposal of Smithfield Granite Co. to furnish stone for Washington bridge over the Providence river was accepted, and a contract was subsequently executed.

February 1st, a notice was issued and was subsequently delivered to Kenneth McKay, notifying him that the city would take possession of the work of building the abutment walls and piers for the Washington bridge near Exchange place, and would proceed to complete the work at his expense.

The following work was in progress at the end of the quarter, viz.:

No. of resolution.	Date of approval.	
466.	Aug. 2, 1892,	*Washington bridge over Providence river:*—to build bridge and abutment walls.
641.	Oct. 8, "	*City Dock:*—to purchase materials and build.

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The following work had not commenced March 31, 1893, viz. :

No. of resolution.	Date of approval.	
830.	Dec. 20, 1892,	*Francis street bridge over Woonasquatucket river.*
831.	" " "	*Oak street foot-bridge over railroad tracks.*
832.	" " "	*Acorn street bridge over Woonasquatucket river.*

Bills approved on account of bridges from January 1 to March 31, 1893, inclusive, amounted to . . . $17,757 90

Charged as follows :

Atwell's avenue bridge	$ 1 85
Barn expenses	64 94
Branch avenue bridge	3 07
Branch avenue culvert	91
Building at city yard	12 00
Cemetery street bridge	92
Central or Red bridge	17 87
Charles street bridge	4 67
Delaine street bridge	91
Eagle street bridge	2 43
Gaspee street bridge	91
Geneva bridge	92
Hawkins street bridge	92
Hemlock street bridge	1 50
Horses, wagons, harnesses, etc	28 43
Lumber, hardware, etc	687 94
Nash Lane bridge	1 85
Park street bridge	92
Point street bridge	347 41
Railroad Crossing street bridge	2 00
Randall street bridge	2 26
Rent of keeper's house, Washington bridge	30 00
Salaries—Central or Red bridge	420 00
Salaries—Point street bridge	921 00
Salaries—Washington bridge	456 25
Amount carried forward	$3,011 88

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Amount brought forward	$3,011 88
[illegible] avenue bridge	93
[illegible] street bridge	3 74
[illegible]	81 22
[illegible] bridge—Manton avenue	3 18
[illegible]	209 85
[illegible] street bridge—north span	1 85
[illegible] street bridge	91
[illegible] bridge	94
[illegible]ington bridge near India Point	322 22
[illegible]ington bridge over Providence river—to rebuild	14,119 31
[illegible] River street bridge	93
[illegible]den street bridge	94
	$17,757 90

Bills for expenditures for construction of wharf at the new city dock from January 1 to March 31, 1893, inclusive, have been approved and paid from the appropriation for contingencies to the amount of $16,927 59

Bills deposited with the city treasurer for collection from January 1 to March 31, 1893, inclusive, (for lot of old lumber), amounted to $16 00

During the quarter, coupons from bills collected (for lot of old lumber), have been returned by the city treasurer and receipted for, amounting to $16 00

ROBERT E. SMITH,

Commissioner.

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CITY DOCUMENT.

FORTY-SECOND QUARTERLY REPORT

OF THE

DEPARTMENT OF PUBLIC

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING JUNE 30, 1893.

J. A. & R. A. Reid,
Dyer and Printers,
1893.

CITY PRINTERS
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FORTY-SECOND QUARTERLY REPORT

OF THE

DEPARTMENT OF PUBLIC WORKS

OF THE

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QUARTER ENDING JUNE 30, 1893.

J. A. & R. A. Reid, City Printers,
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REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., July 1, 1893.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the forty-second quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and the cost of same for the quarter ending June 30, 1893.

WATER WORKS.

June 30th, the offer of Providence Coal Co. to furnish and deliver at Hope Pumping Station the following quantities of coal was accepted, viz.: 275 tons egg coal; 225 tons stove coal.

The average daily consumption of water during the last quarter was 8,854,677 gallons.

Water pipes were laid during the quarter as follows:

12-INCH.

In Fenner avenue..... 221.55 feet.

8-INCH.

In Henderson street, Butler, Fruit Hill, Northup and President avenues; in Cranston street, Town of Cranston; and in Fruit Hill avenue, Town of North Providence..... 7,922.58 feet.

6-INCH.

In Aleppo, Allston, Blackstone, Cornell, Crescent, Delaine, Depew, Douglass, Elmwood, Gardner, Glossop, Hamilton, Henderson, Ives, Knowles, Kossuth, Lauriston, Ledge, Manning, Mitchell,

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Morgan, Oak, Pacific, Parnell, Pearl, Seamans, Sorrento, Uncas and White streets, Adelphi, Arlington, Butler, Elmgrove, Lincoln, Lorimer, Marlborough, Massachusetts, Ohio, Princeton, Regent, Tuxedo, Washington, Wentworth, Weston, Wheeler and Winthrop avenues; in Davis park, Falls place, Taudvin and Washington courts; in Oak street and Laurel Hill avenue, Town of Johnston; and in Blaine, Brooks, Butler, Nichols and Wellington streets, Laurel Hill, Narragansett, Norton, Princess, Roger Williams, Sumner, Washington, Wentworth and Wheeler avenues, Town of Cranston	24,992.38 feet.
Total	33,136.51 feet,

or 6.276 — miles.

Water pipes were removed during the quarter as follows:

8-INCH.

In Butler avenue	1,066.98 feet.

6-INCH.

In Henderson street	219.56 feet.
Total	1,286.54 feet,

or .244 — miles.

Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.00 feet.
30-inch	59,893.04 feet.
24-inch	43,418.92 feet.
20-inch	9,626.59 feet.
16-inch	32,167.76 feet.
12-inch	76,956.68 feet.
10-inch	14,652.26 feet.
8-inch	218,241.92 feet.
6-inch	926,874.97 feet.
Total	1,391,916.14 feet,

or 263.620 + miles.

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Twenty-seven fire hydrants have been set during the quarter, one in each of the following locations:

Arlington avenue, east side, about 150 feet north of Humboldt avenue.
Butler avenue, east side, at Vernon avenue.
Chapin avenue, north side, about 220 feet east of Ellery street.
Delaine street, north side, at the westerly corner of Rodgers court.
Douglass street, north side, about 160 feet west of Butler avenue.
Douglass street, north side, about 200 feet east of Wayland avenue.
Douglass street, north side, about 170 feet west of Wayland avenue.
Douglass street, north side, about 120 feet east of Gano street.
Douglass street, north side, about 260 feet east of Ives street.
Dyer avenue, Johnston, north side, about 210 feet east of Rocky Hill avenue.
Elmwood avenue, west side, about 150 feet south of Sackett street.
Elmwood avenue, west side, about 150 feet north of Roger Williams avenue.
Elmwood avenue, west side, about 250 feet south of Roger Williams avenue.
Elmwood avenue, west side, opposite Union Railroad Company's stable.
Elmwood street, north side, about 420 feet east of Crescent street.
Fruit Hill avenue, west side, at the northerly corner of Glossop street.
Henderson street, south side, about 180 feet east of Allens avenue.
Henderson street, south side, about 635 feet east of Allens avenue.
Howard street, Johnston, north-east side, at the north-east corner of Lewis street.
Lawn street, east side, about 380 feet north of Chalkstone avenue.
Ledge street, north side, about 440 feet east of Charles street.
Lorimer avenue, east side, at the north-east corner of Lauriston street.
Massachusetts avenue, north side, about 200 feet west of Maryland avenue.
McKinley street, north side, about 360 feet east of Elmwood avenue.
Mitchell street, north side, about 160 feet west of Broad street.
Northup avenue, north side, in line with the east line of Silver Spring street.
Princeton avenue, south side, about 180 feet east of Bucklin street.

The total number of fire hydrants is now fifteen hundred and twenty-one: fourteen hundred and seventy-two flush, and forty-nine post hydrants.

During the quarter three hundred and twenty-eight water meters were set, of which number fourteen were to replace other meters. The use of sixteen meters was discontinued.

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The following meters were in use at the close of the quarter:

KIND.	SIZE.							TOTAL
	⅝-in.	¾-in.	1-in.	1½-in.	2-in.	3-in.	4-in.	
Ball & Fitts, piston	3,057	606	144	35	5			3,847
Ball & Fitts, rotary			22	20	2	5	2	51
Crown	5,316	657	173	75	23	10	10	6,264
Fales, Jenks & Sons		1	1					2
Neptune	28							28
Thomson.....	1,047	141	31	30	8	3	1	1,261
Worthington.....	8	1			1		1	11
	9,456	1,406	371	160	39	18	14	11,464

Nine plumbers' licenses were issued during the quarter, making the total number ninety-seven, all of which expire December 31, 1893.

Seventeen hundred and three permits to do plumbing work were issued during the quarter.

Three hundred and twenty-two applications for water were made during the quarter, making the total number June 30, 1893, eighteen thousand eight hundred and eighty-five.

The number of new service stops opened during the quarter was two hundred and sixty-eight.

The total number of service stops opened to June 30, 1893, inclusive, was eighteen thousand one hundred and two. The number in actual use June 30, 1893, was sixteen thousand nine hundred and ninety-seven.

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The amount of bills approved on account of water works from April 1 to June 30, 1893, inclusive, was:

For construction and extension, . . $39,646 68

Classified as follows:

Cast iron water pipe	$25,486 66	
Laying water pipe	6,469 89	
Special castings	1,262 75	
Laying service pipe	1,244 84	
Barn at Pettaconset	1,125 00	
Experimental tests of water filtration	816 65	
Rent of wharf and pipe yard	750 00	
Taps and stops	694 56	
Labor on and carting pipe	687 57	
Tools	446 26	
Wharf salaries	195 00	
Barn expenses	180 12	
Public drinking fountains and troughs	102 30	
Fruit Hill reservoir, for repairs	100 34	
Horses, wagons, harnesses, etc	78 14	
Stop valves	6 60	
	$39,646 68	

For maintenance, ... $21,298 30

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$2,872 24	
Firemen	777 90	
Sundries	645 17	
Engineers	513 50	
Superintendence	299 00	
Real estate	259 01	
Care of grounds	102 45	
Oil, waste and packing	90 56	
Corliss pumping engine and house	75 28	
Labor on fuel	57 00	
Barn expenses	41 78	
Lights	18 00	
Worthington pumping engine	6 26	
Cornish engine house	2 20	
		$5,760 35
Amount carried forward		$5,760 35

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Amount brought forward		$5,760 35
Sockanosset Reservoir.		
Sundries	$188 35	
Watchman	136 50	
		324 85
Hope Pumping Station.		
Engineers	$575 25	
Coal and wood	490 00	
Firemen	418 60	
Care of grounds	126 75	
Lights	108 25	
Sundries	103 29	
Hope pumping engine, No. 2	55 78	
Oil, waste and packing	39 10	
Hope pumping engine, No. 1	27 39	
		1,944 4
Hope Reservoir.		
Sundries	$470 81	
Watchman	204 75	
		675 5
Fruit Hill Reservoir.		
Watchman	$182 00	
Sundries	72 66	
		254 6
Pipe Line and Service Stops.		
Repairs	$2,213 41	
Superintendence—salaries	851 61	
		3,065 (
Meter Department.		
Water meters	$2,867 97	
Setting and repairing meters	1,788 00	
		4,655 ;
Miscellaneous.		
Clerks' and inspectors' salaries	$2,453 42	
Town of Cranston, tax	840 00	
Horses, wagons, harnesses, etc.	592 62	
Prevention of defilement of the Pawtuxet	360 44	
Barn expenses	200 75	
Analyses of water	100 50	
Pipe yard—office expenses	24 20	
Sundries	19 40	
Amounts carried forward	$4,591 33	$16,680

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Amounts brought forward	$4,591 33	$16,680 82
Real estate at Pawtuxet	17 50	
Public drinking fountains and troughs	8 65	
		4,617 48
		$21,298 30

The amount of expenditures from April 1 to June 30, 1893, inclusive, was . . $60,944 98

The total expenditures to June 30, 1893, inclusive, were $7,683,188 38

The *net* expenditure for construction and extension from April 1 to June 30, 1893, inclusive, was	$38,473 15
The *net* expenditure for construction and extension to June 30, 1893, inclusive, was	$5,882,415 69
The *net* expenditure for maintenance from April 1 to June 30, 1893, inclusive, was	$13,010 41
The *net* expenditure for maintenance to June 30, 1893, inclusive, was	$1,125,327 58

Bills deposited with the city treasurer for collection from April 1 to June 30, 1893, inclusive, amounted to $58,591 13

As follows:

Water	$47,770 14
Water meters	5,892 00
Setting and repairing meters	3,417 65
Rent of real estate	250 02
Permanently closing service stops	65 00
Penalties	44 00
Examination and repairs of pipe line	39 67
Labor and material — laying service pipes, etc.	1,026 97
Moving material at pipe yard	85 68
	$58,591 13

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $56,303 95

As follows:

Water	$46,931 76
Water meters	5,892 00
Amount carried forward	$52,823 76

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Amount brought forward	$52,823 76
Setting and repairing meters	2,031 00
Rent of real estate	259 02
Permanently closing service stops	65 00
Penalties	44 00
Examination and repairs of pipe line	40 87
Labor and material—laying service pipes, etc.	954 62
Moving material at pipe yard	85 68
	$56,303 95

SEWERS.

During the quarter ending June 30, 1893, nine hundred and eighty-two permits were issued to drain layers: seven hundred and eighty for new work, and two hundred and two for extension and repairs of drains.

Nine drain layers' licenses were issued during the quarter, making the total number fifty-seven, all of which expire December 31, 1893.

April 25th, the contract with Winslow & Co., of Portland, Maine, was extended to include the following additional sewer material, namely:

1,200 pieces 15-inch straight pipe;
500 pieces 15-inch by 6-inch branch pipe;
6,000 pieces 12-inch straight pipe;
2,000 pieces 12-inch by 6-inch branch pipe;
15 pieces 12-inch by 8-inch branch pipe.

May 26th, the offer of Winslow & Co., to furnish the following sewer material was accepted, namely:

1,152 feet 18-inch straight pipe;
480 feet 18-inch by 6-inch branch pipe;
30 feet 18-inch by 8-inch branch pipe;
2,100 feet 18-inch straight pipe, double thick.

June 5th, the offer of New England Steam Brick Co. to furnish one million sewer brick for the improved sewerage system was accepted.

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During the quarter assessments for the cost of constructing sewers were certified to the city treasurer, as follows:

Cypress street	$3,396 28
Lexington avenue	1,244 30
Common and Carroll streets	1,339 05
Bucklin street and Potters avenue	3,492 58
Potters avenue	2,959 39
Diamond street	2,351 82
Canal street	915 18
Pope street	947 18
Hendrick and Carleton streets	2,906 37
Total	$19,552 15

April 17th, a contract for building sewers was awarded as follows:

[The amounts given below are what are estimated will be paid the contractors for labor, and do not include cost of inspection and materials, or rock excavation.]

To Everson & Liddle.

No. of resolution.	Date of approval.		
184.	April 8, 1893,	*Allston street and Regent avenue*, .	$471 70

April 21st, a contract for building a sewer as a part of the improved sewerage system was awarded, and subsequently executed, as follows:

To James J. Newman.

No. of resolution.	Date of approval.		
179.	April 8, 1893,	*Aleppo street, from Manton avenue to its westerly termination*, ...	$16,336 00

May 5th, contracts for building sewers were awarded and subsequently executed, as follows:

To George R. Newman.

No. of resolution.	Date of approval.		
181.	April 8, 1893,	*Camp street, from near Grand View to Cypress*, . .	$834 27

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No. of resolution.	Date of approval.				
185.	April	8,	1893,	*Daboll street, from Dexter to Public,*	$2,651 03
189.	"	"	"	*Grant street, from Carpenter to Knight,*	907 72
190.	"	"	"	*Julian street, from near Atwells avenue to Amherst street,*	570 41
193.	"	"	"	*Pavilion avenue, from Prairie to Ocean street,* . .	793 81
195.	"	"	"	*Redwing street, from Bucklin westerly,*	337 24
				To Moulton and O'Mahoney.	
180.	April	8,	1893,	*Balch street, Pacific and Hamburg avenues,*	6,376 00
				To J. Frank Read & Co.	
182.	April	8,	1893,	*Chalkstone avenue, from near Pekin street to Candace,*	841 70
183.	"	"	"	*Congress avenue, from Elmwood to Hamilton street,* .	1,568 20
192.	"	"	"	*Parade and Susan streets,*	1,370 20
				To Everson and Liddle.	
186.	April	8,	1893,	*Eagle street, from Harris avenue to the river,*	8,861 50
187.	"	"	"	*Eddy and Ashmont streets,*	8,558 00
188.	"	"	"	*Elmgrove avenue, from Angell street to Humboldt avenue,*	733 00

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To FREDERICK E. SHAW.

No. of resolution.	Date of approval.		
191.	April 8, 1893,	*Oak, Willow, Hudson, Wood, Messer and Ellery streets, and Chapin avenue,*	$12,629 15

To FRANKLIN A. SNOW.

194.	April 8, 1893,	*Penn street, from Almy to Vinton,*	1,353 80

May 16th, the consent of the Commissioner of Public Works was given for assignments of contracts of John Keogh for building sewers to Timothy F. Lyons, as follows:

No. of resolution.	Date of approval.	
363.	July 1, 1892,	*Candace, Winsor, Orms, Valley and Smith streets.*
562.	Sept. 16, 1892,	*Chalkstone avenue, from Douglas to Candace street.*
651.	Oct. 8, 1892,	*Winslow street, from Broad to Weybosset.*

May 19th, the contract for building the following sewer was awarded, and subsequently executed, namely:

To FREDERICK E. SHAW.

No. of resolution.	Date of approval.		
138.	Mar. 21, 1893,	*Norfolk and Station streets, Huntington avenue, Chambers and Burrington streets, Improved Sewerage System,*	$78,098 25

May 23d, contracts for building sewers were awarded as follows, namely:

To EVERSON & LIDDLE.

No. of resolution.	Date of approval.		
316.	May 20, 1893,	*Harris avenue, from Atwells avenue to Eagle street,* . .	$817 25

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No. of resolution.	Date of approval.	
321.	May 20, 1893,	*Regent Allston*

To GEORGE R.]

319.	May 20, 1893,	*Orchar from Butler,*

June 7th, contracts for buildin awarded, and subsequently execu

To GEORGE R.

No. of resolution.	Date of approval.	
245.	May 16, 1893,	*A and*
311.	" 20, "	*Camp North*
313.	" " "	*Black man s*
315.	" " "	*East Pleas Olney*
322.	" " "	*Sabi Abor*
323.	" " "	*Stan from to H*
324.	" " "	*Wi Ea F*

To F

314. May 20, 18

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To WILLIAM E. SHERMAN.

No. of resolution.	Date of approval.		
317.	May 20, 1893,	*Jessamine, Brattle and Waldo streets,*	$3,234 50
318.	" " "	*Hospital street, from Point to Manchester,*	591 75
320.	" " "	*Potters avenue and Laura street,* . .	2,374 60

June 12th, a contract for building the following sewer was awarded and executed, namely:

To J. FRANK READ & CO.

No. of resolution.	Date of approval.		
352.	June 6, 1893,	*Hawes and Quade streets,*	$1,466 04

June 17th, contracts for building the following sewers were awarded, and subsequently executed, namely:

To GEORGE R. NEWMAN.

No. of resolution.	Date of approval.		
369.	June 16, 1893,	*Mathewson street, from Fountain to Cove,*	$701 80

To J. FRANK READ & CO.

372.	June 16, 1893,	*Wickenden, South Main and Crawford streets,* . .	5,131 20

During the quarter, the construction of the following sewers was completed, namely:

No. of resolution.	Date of approval.		Date of completion.
265.	May 9, 1892,	*Manton avenue, from near Florence street to Woonasquatucket river,* . .	June 5, 1893.
455.	Aug. 2, "	*Hannah street, from Amsterdam to Amherst,*	Apr. 20, 1893.
562.	Sept. 16, "	*Chalkstone avenue, from Douglas to Candace street,* . .	June 7, 1893.

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No. of resolution.	Date of approval.				Date of completion.
645.	Oct.	8,	1892,	*Elmwood avenue, from Lexington to railroad bridge,*	Apr. 24, 1893.
646.	"	"	"	*Lavaughn street, from Atwells avenue to Amherst street,*	Apr. 4, 1893.
655.	"	"	"	*Valley street, from Eagle to Rathbone,*	June 30, 1893.
684.	"	25,	"	*Audrey street, from Bowdoin to Delaine,*	Apr. 3, 1893.
689.	"	"	"	*Lexington avenue, from near Melrose street to Elmwood avenue,*	Apr. 11, 1893.
729.	Nov.	17,	"	*Whipple street, from Douglas avenue to end of present sewer,*	Apr. 28, 1893.
754.	"	18,	"	*Potters avenue, from Broad street to Prairie avenue,*	May 17, 1893.
764.	"	"	"	*Douglass street, from Gano to Butler avenue,*	May 16, 1893.
785.	Dec.	3,	"	*Mathewson street, from Washington to Fountain,*	Apr. 28, 1893.
786.	"	"	"	*Tefft street, from Atwells avenue to West Exchange street,*	Apr. 26, 1893.
69.	Feb.	4,	1893,	*Angell street and Butler avenue,*	Apr. 24, 1893.

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No. of resolution.	Date of approval.		Date of completion.
70.	Feb. 4, 1893,	*Dean and Cedar streets,*	Apr. 27, 1893.
71.	" " "	*Gano, East George and Amy streets,*	June 24, 1893.
72.	" " "	*Marlborough avenue, Taylor, Glenham and Moore streets,*	May 10, 1893.
73.	" " "	*Oak street, from Messer to Norfolk,*	Apr. 22, 1893.
74.	" " "	*Eddy street and Pavilion avenue,*	Apr. 14, 1893.
75.	" " "	*Portland street, from Hayward to Broad,* . . .	May 27, 1893.
76.	" " "	*Regent avenue and Cornell street,* . .	May 15, 1893.
77.	" " "	*Wayland avenue, from Angell street to Humboldt avenue,*	May 25, 1893.
182.	April 8, "	*Chalkstone avenue, from 50 feet west of Pekin street to Candace,*	May 23, 1893.
183.	" " "	*Congress avenue, from Elmwood to Hamilton street,* .	June 20, 1893.
184.	" " "	*Allston street and Regent avenue,* .	May 26, 1893.
185.	" " "	*Daboll street, from Dexter to Public,*	June 19, 1893.
189.	" " "	*Grant street, from Carpenter to Knight,*	June 7, 1893.
192.	" " "	*Parade and Susan streets,*	June 3, 1893.

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No. of resolution.	Date of approval.				Date of complet
193.	April	8,	1893,	*Pavilion avenue, from Prairie to Ocean street,* . .	May 22,189
195.	"	"	"	*Redwing street, from Bucklin to its westerly termination,* .	May 24,189
319.	May	20,	"	*Orchard avenue, from Wayland to Butler,*	June 2, 189
321.	"	"	"	*Regent avenue and Allston street,* . .	May 26,189

At the close of the quarter, work upon the following se ers of the improved sewerage system was in progre namely:

No. of resolution.	Date of approval.			
652.	Oct.	8,	1892,	*Gaspee and Cove streets.*
653.	"	"	"	*Dorrance street, from Cove to Dy*
654.	"	"	"	*Promenade street, from Rathb to Gaspee.*
179.	Apr.	8,	1893.	*Aleppo street, from Manton ave to its westerly termination.*

Work upon the following lateral sewers was in progr at the close of the quarter, namely:

No. of resolution.	Date of approval.			
363.	July	1,	1892,	*Candace, Winsor, Orms, Va and Smith streets.*
651.	Oct.	8,	"	*Winslow street, from Broad Weybosset.*
186.	Apr.	8,	1893,	*Eagle street, from Harris ave to the river.*
187.	"	"	"	*Eddy and Ashmont streets.*
190.	"	"	"	*Julian street, from near Atw avenue to Amherst street.*

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No. of resolution.	Date of approval.	
191.	April 8, 1893,	*Oak, Willow, Hudson, Wood, Messer, Ellery streets and Chapin avenue.*
194.	" " "	*Penn street, from Almy to Vinton.*
313.	May 20, "	*Blackstone and Bogman streets.*
316.	" " "	*Harris avenue, from Atwells to Eagle street.*
318.	" " "	*Hospital street, from Point to Manchester.*
352.	June 6, "	*Hawes and Quade streets.*

Work upon the following sewers, completing the work ordered by the city council, had not commenced June 30, 1893, namely:

No. of resolution.	Date of approval.	
138.	Mar. 21, 1893,	*Norfolk and Station streets, Huntington avenue, Chambers and Burrington streets.*
180.	Apr. 8, "	*Balch street, Pacific and Hamburg avenues.*
181.	" " "	*Camp street, from near Grand View to Cypress.*
188.	" " "	*Elmgrove avenue, from Angell street to Humboldt avenue.*
244.	May 16, "	*Jillson and Eddy streets.*
245.	" " "	*A and Rice streets.*
311.	" 20, "	*Camp, North and North Main streets.*
312.	" " "	*Canal street and Canal avenue.*
314.	" " "	*Burnside and Briggs streets.*
315.	" " "	*East avenue, from Pleasant street to Olney.*
317.	" " "	*Jessamine, Brattle and Waldo streets.*
320.	" " "	*Potters avenue and Laura street.*
322.	" " "	*Sabin street, from Aborn to Cove.*

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No. of resolution.	Date of approval.			
323.	May	20,	1893,	*Stampers street, from North Main to Hewes.*
324.	"	"	"	*Williams, Fremont, East Transit and Preston streets.*
368.	June	16,	"	*Hope street, from Thayer to Lloyd.*
369.	"	"	"	*Mathewson street, from Fountain to Cove.*
370.	"	"	"	*Superior and Wendell streets.*
371.	"	"	"	*Vineyard street, from Hawthorne to Potters avenue.*
372.	"	"	"	*Wickenden, South Main and Crawford streets.*
411.	"	30,	"	*Tockwotton street, or land owned by the city, from Gano street to the Seekonk river.*

The amount of bills approved on account of sewers from April 1 to June 30, 1893, inclusive, was:

FOR CONSTRUCTION.

Regular appropriation	$118,032 71	
Improved sewerage appropriation	125,391 39	
		$243,424 10

Charged as follows:

Materials	$41,903 16
Contract reservations	2,510 00
Salaries of assistant engineers	2,424 00
Sundries—improved sewerage system	1,935 60
Clerks' salaries	878 25
Additional catch-basins	800 27
Testing cement	428 28
Sundries	105 38
Tools	25 25
Sewer in Allston street and Regent avenue	450 16
Sewer in Angell street and Butler avenue	2,459 19
Sewer in Audrey street, from Bowdoin to Delaine	543 49
Sewer in Blackstone and Bogman streets	1,874 91
Amount carried forward	$56,337 94

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Amount brought forward	$56,337 94
Sewer in Candace, Winsor and Orms streets, etc.	2,810 42
Sewer in Chalkstone avenue, from Douglas to Candace street	882 05
Sewer in Chalkstone avenue, from 50 feet west of Pekin street to Candace	900 78
Sewer in Congress avenue, from Elmwood to Hamilton street	1,643 07
Sewer in Daboll street, from Dexter to Public.	2,815 81
Sewer in Dean and Cedar streets	2,993 75
Sewer in Douglass street, from Gano to Butler avenue	2,001 38
Sewer in Eagle street, from Harris avenue to the river	7,485 78
Sewer in Eddy and Ashmont streets	934 98
Sewer in Eddy street and Pavilion avenue	2,363 91
Sewer in Elmwood avenue, from Lexington to railroad bridge south of Roger Williams avenue	5,117 78
Sewer in Gano, East George and Amy streets	9,231 71
Sewer in Grant street, from Carpenter to Knight	1,019 89
Sewer in Hannah street, from Amsterdam to Amherst	1,294 92
Sewer in Hawes and Quade streets	677 65
Sewer in Hospital street, from Point to Manchester	355 59
Sewer in Julian street, from near Atwells avenue to Amherst street	19 53
Sewer in Lavaughn street, from Atwells avenue to Amherst street	1,623 96
Sewer in Lexington avenue, from about 200 feet of Melrose street to Elmwood avenue	486 76
Sewer in Manton avenue, from near Florence street to Woonasquatucket river	4,532 06
Sewer in Marlborough avenue, Taylor, Glenham and Moore streets	2,035 42
Sewer in Mathewson street, from Washington to Fountain	449 64
Sewer in Oak street, from Messer to Norfolk	1,068 49
Sewer in Oak, Willow and Hudson streets, etc.	8,535 79
Sewer in Orchard avenue, from Wayland to Butler	1,261 73
Sewer in Parade and Susan streets	1,456 79
Amount carried forward	$120,337 58

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Amount brought forward	$120,337 58	
Sewer in Pavilion avenue, from Prairie to Ocean street	858 41	
Sewer in Penn street, from Almy to Vinton	848 17	
Sewer in Plain street, from Public to Bishop	3 00	
Sewer in Portland street, from Hayward to Broad	314 05	
Sewer in Potters avenue, from Broad street to Prairie avenue	1,526 31	
Sewer in Public street, from Ocean to Plain	72	
Sewer in Redwing street, from Bucklin to its westerly termination	429 28	
Sewer in Regent avenue and Allston street	814 91	
Sewer in Robin street, Regent avenue and Cornell street	1,549 31	
Sewer in Tefft street, from Atwells avenue to West Exchange street	762 34	
Sewer in Wayland avenue, from Angell street to Humboldt avenue	873 14	
Sewer in Whipple street, from Douglas avenue to end of present sewer	776 47	
Sewer in Winslow street, from Broad to Weybosset	81 90	
Sewer in Aleppo street, from Manton avenue to its westerly termination	6,248 44	
Sewer in Canal street, from Steeple to Market square	58	
Sewer in Dorrance street, from Cove to Dyer	24,476 01	
Sewer in Norfolk and Station streets, etc.	369 64	
Sewer in Promenade street, from Rathbone to Gaspee	34,403 08	
Sewer in Valley street, from Eagle to Rathbone	48,750 76	
	$243,424 10	
For maintenance, ...		$9,538 00

Charged as follows:

Cleaning basins and sewers	$3,094 12
Repairing basins and sewers	2,404 85
Inspection of connections	1,201 08
Horses, wagons, harnesses, etc.	974 07
Tools	463 07
Cleaning and repairing old drains	456 41
Salary—superintendent	390 00
Amount carried forward	$8,983 60

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Amount brought forward	$8,983 60	
Barn expenses	353 18	
Cleaning private connections	91 65	
Filling cisterns, etc	65 72	
Sundries	43 85	
	$9,538 00	
The *net* expenditure for construction of sewers to June 30, 1893, inclusive, was		$3,996,079 57
The *net* expenditure for maintenance of sewers to June 30,1893, inclusive, was		$385,267 74

Bills deposited with the city treasurer for collection from April 1 to June 30, 1893, inclusive, amounted to - - $260 21

As follows:

Cleaning private connections	$131 10	
Cleaning sewers	14 10	
Use of boiler and pulsometer	6 00	
Pumping out cellars	3 75	
Laying drains to curbstone	105 26	
	$260 21	

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for amounting to $290 82

As follows:

Cleaning private connections	$142 35	
Cleaning sewers	14 10	
Use of boiler and pulsometer	6 00	
Pumping out cellars	3 75	
Laying drains to curbstone	124 62	
	$290 82	

HIGHWAYS.

Five permits to open streets were issued during the quarter.

April 25th, the offer of John T. Tank to furnish and deliver from three hundred to five hundred feet of granite curbing was accepted.

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May 2d, the offer of John Garvey to furnish circular curbing for Elmwood avenue was accepted.

Statements have been prepared of the cost of curbstones set, ascertained by the commissioner and certified to the board of aldermen for approval, as follows:

Admiral street, from Whipple to Charles.....	$ 130 60
Arnold street. from Brook to Thayer.....	222 00
Ashburton street, from Charles to Tremont.....	1,442 85
Colfax street, from Plain to Broad.....	2,919 87
Delhi street, from Chalkstone avenue to Webster street.....	322 08
Gallup street, from Prairie avenue to Broad street.....	1,343 66
Hudson street, from Messer to Ellery.....	716 86
Miner street, from Oxford to Fruit.....	553 12
Sheldon street, from Benefit to Brook.....	531 51
Arlington avenue, east side, from Angell street to Irving avenue.....	730 27
Gardner street, from Camp to Knowles.....	568 79
Knowles street, from Pleasant to Cypress.....	1,228 48
Knowles street, from Cypress to Abbott.....	284 97
Livingston avenue, from North Main street to Printery.....	631 08
Total.....	$11,626 14

During the quarter statements of the cost of concreti sidewalks, with ten per centum added to cover the cost assessing and collecting, were certified to the assessors taxes, viz.:

Pitman street, north side, from Governor to Ives.....	$57 02

During the quarter the following work was completed:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
Sept. 15, 1892,	*Pope street, from Manton avenue to A herst street.*
" " "	*Lexington avenue, from Melrose street Hamilton.*

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Date of order.			
Oct.	20,	1892,	*Langdon street, from Branch avenue to Sherman street.*
"	"	"	*Mawney street, from Bucklin to Dexter.*
"	"	"	*Steere avenue, from Manton to Amherst street.*
Dec.	15,	"	*Arlington avenue, east side, from Angell street to Irving avenue.*
Feb.	16,	1893,	*Gardner street, from Camp to Knowles.*
"	"	"	*Knowles street, from Pleasant to Cypress.*
Mar.	16,	"	*Blackstone street, from Prairie avenue to Plain street.*
"	"	"	*Delaine street, from Woonasquatucket river to Valley street.*
"	"	"	*Princeton avenue, from Greenwich street to Bucklin.*
"	"	"	*Salem street, from Potters avenue to Waldo street.*
"	"	"	*Livingston avenue, from North Main street to Printery.*
April	20,	"	*Knowles street, from Cypress to Abbott.*

TO BE PAVED WITH GRANITE BLOCKS.

No. of resolution.	Date of approval.			
551.	Sept.	16,	1892,	*Broad street, from Chestnut to Pearl.*
555.	"	"	"	*Pike street, from Brook to South Main.*
642.	Oct.	8,	"	*Tockwotton street, from East to South Main.*
672.	"	22,	"	*Point street, from Chestnut to near Beacon avenue.*
265.	May	17,	1893,	*South Main street, from Transit to India.*

TO REMOVE OBSTRUCTIONS AND RESET CURBSTONES.

Date of order.			
Oct.	20,	1892,	*Knight street, from High to Broadway.*

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To Take Possession.

Date of order.	
Dec. 15, 1892,	*Julian street, from Amherst to Atwells avenue.*
" " "	*Kossuth street, from Hyat to Pope.*
Mar. 2, 1893,	*Henderson street, from Allens avenue to its easterly termination.*
April 20, "	*North street, from North Main to Swan Point road.*

To Reset Curb and Repave Gutters.

Dec. 15, 1892,	*Valley street, west side, from driveway near Grove street to opening in curb about 250 feet south of Delaine street.*

To Concrete Sidewalks.

No. of resolution.	Date of approval.	
855.	Dec. 30, 1892,	*Pitman street, north side, from Governor to Ives.*
856.	" " "	*East, Tockwotton and Wickenden streets surrounding Tockwotton Park.*

To Concrete Sidewalk and Build Driveway.

208. April 18, 1893,	*Amherst street, adjoining Fire Station No. 14.*

To Put in Good Condition.

Date of order.	
Jan. 2, 1893,	*Elmwood avenue, from old city line to new city line.*

The following work was in progress June 30, 1893, viz.:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
Oct. 20, 1892,	*Whipple street, from Admiral to Douglas avenue:*—to be rolled and gutters concreted.

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Date of order.			
Oct.	20,	1892,	*Douglass street, from Ives to Butler avenue:*—curbing set.
Nov.	23,	"	*Cornell street, from Regent avenue to Valley street:*—in process.
Mar.	16,	1893,	*Butler avenue, from Elton street to North:*—in process.
April	20,	"	*Dexter street, from Cromwell to Potters avenue:*—in process.
"	"	"	*Marlborough avenue, from Broad street to Taylor:*—to be rolled and gutters concreted.
June	29,	"	*Butler avenue, from Orchard to Elton street:*—in process.

To Build and Curb.

No. of resolution.	Date of approval.		
725.	Nov. 17,	1892,	*Elmwood avenue, from Lexington to the railroad bridge:*—in process.

To Take Possession, Remove Obstructions and Grade.

Date of order.			
June	2,	1892,	*Bucklin street, from Daboll to Cromwell:*—in process.

To Grade and Put in Good Condition.

No. of resolution.	Date of approval.		
590.	Sept. 20,	1892,	*Butler avenue, from its southerly terminus to North street:*—in process.
	June 15,	1893,	*Gordon avenue from Colfax street to Public:*—in process.
402.	" 27,	"	*Butler avenue, from its southerly terminus to North street:*—in process.

To be Paved with Granite Blocks.

611.	Sept. 22,	1892,	*High street, from Barton to Olneyville square:*—in process.

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No. of resolution.	Date of approval.	
265.	May 17, 1893,	*Randall street, from Randall square to North Main street:*—in process.
265.	" " "	*Steeple street, from Canal to North Main:*—in process.
265.	" " "	*Mathewson street, from Westminster to Washington:*—in process.

The following work, ordered by the board of aldermen and city council, had not commenced June 30, 1893, viz.:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.		
Nov. 17,	1892,	*Robin street, from Regent avenue to Allston street.*
" 23,	"	*Regent avenue, from River to Cornell street.*
Feb. 16,	1893,	*Ashmont street, from Ocean to Eddy.*
Mar. "	"	*Kossuth street, from Hyat to Pope.*
" "	"	*Wood street, from Messer to Ellery.*
" "	"	*Julian street, from Amherst to Atwells avenue.*
" "	"	*Allston street, from River avenue to Cornell street.*
April 20,	"	*Lexington avenue, from Elmwood to Melrose street.*
June 15,	"	*Bucklin street, from Burnett to Oakland.*
" "	"	*Gano street, from Pitman to Tockwotton.*
" "	"	*Mallett street, from Olney to Bates.*
" "	"	*North street, from North Main to Swan Point road.*
" "	"	*Orchard avenue, from Wayland to Butler.*
" "	"	*Parnell street, from Atwells avenue to its northerly termination.*
" "	"	*Veazie street, from Douglas avenue to Branch.*

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To be Paved with Granite Blocks.

No. of resolution.	Date of approval.	
671.	Oct. 22, 1892,	*Manton avenue, from Chafee street to Florence.*
724.	Nov. 17, "	*Charles street, from Randall square to near Ashburton street.*
265.	May " 1893,	*South Main street, from Planet to James.*
265.	" " "	*Canal streeet, from Bowen to Smith.*
265.	" " "	*Wickenden street, from Transit to Brook.*
265.	" " "	*Westminster and Weybosset streets, from Weybosset bridge to Dorrance street.*

To be Paved with Bricks.

610.	Sept. 22, 1892,	*Eagle street, from Harris avenue to Kinsley.*
265.	May 17, 1893,	*Weybosset street, from Custom House to Post-office court.*
265.	" " "	*Mathewson street, from Washington to Cove.*

To Build and Curb.

780.	Dec. 3, 1892,	*Gaspee street, from Cove to Promenade.*

To Take Possession and Put in Safe Condition.

Date of order.	
Nov. 17, 1892,	*Aleppo street, from Manton avenue to property of the Riverside Mills.*

To Take Possession.

May 18, 1893,	*Smith street, from River avenue to city line.*
June 15, "	*Norfolk street, Huntington avenue and Chambers street.*

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To Macadamize.

No. of resolution.	Date of approval.	
303.	May 20, 1893,	*Smith street, from River avenue to city line.*

To Curb Sidewalks.

304.	May 20, 1893,	*Niagara street, adjoining school estate; Wendell street and Messer court, adjoining the Messer street school estate.*

To Construct Channel for Storm Water.

331.	June 6, 1893,	*Vale street, across Danforth street on to the land owned by the city.*

Bills approved on account of highways from April 1 to June 30, 1893, inclusive, amounted to:

Regular appropriation	$ 35,826 92	
Special appropriation	141,532 73	
		$177,359 6

Classified as follows:

Cleaning streets	$16,569 71	
Repairs on unpaved streets	6,667 55	
Barn expenses	2,892 43	
Blacksmith and wheelwright shop	1,673 42	
Tools, implements, etc	1,523 80	
Repairs on paved streets	894 47	
Horses, wagons, harnesses, etc	840 80	
Salaries—superintendent and clerks	741 00	
Steam rollers—repairs and supplies	602 06	
Crushed stone—material and labor	438 88	
Building driveways	257 34	
Sundries	248 49	
Labor on materials	233 20	
Watchman at city yard	204 75	
Watering streets	133 17	
Repairing sidewalks and driveways opposite public buildings	108 55	
Fencing streets—material and labor	32 39	
Repairs on stone crushers	29 66	
Office expenses, city yard	14 08	
		$34,105 75
Amount carried forward		$34,105 75

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Amount brought forward		$34,105 75

New Work—Building and Rebuilding Streets, Etc.

Sidewalks Curbed and Gutters Paved.

Allston street, from River avenue to Cornell street	$ 6 00	
Arlington avenue, east side, from Angell street to Irving avenue	5,136 84	
Blackstone street, from Prairie avenue to Plain street	2,433 02	
Cornell street, from Regent avenue to Valley street	106 92	
Delaine street, from Woonasquatucket river to Valley street	2,371 24	
Dexter street, from Cromwell to Potters avenue	438 79	
Douglass street, from Ives to Butler avenue	2,675 18	
Gano street, from Pitman to Tockwotton	1,300 00	
Gardner street, from Camp to Knowles	1,215 58	
Julian street, from Amherst to Atwells avenue	962 05	
Knowles street, from Cypress to Abbott	543 87	
Knowles street, from Pleasant to Cypress	2,035 22	
Kossuth street, from Hyat to Pope	65 50	
Langdon street, from Branch avenue to Sherman street	63 05	
Lexington avenue, from Elmwood to Melrose street	660 88	
Lexington avenue, from Melrose street to Hamilton	979 65	
Livingston avenue, from North Main street to Printery	1,481 08	
Marlborough avenue, from Broad street to Taylor	974 72	
Mawney street, from Bucklin to Dexter	352 47	
Pope street, from Manton avenue to Amherst street	515 08	
Princeton avenue, from Greenwich street to Bucklin	2,611 32	
Regent avenue, from River to Cornell street	73 60	
Robin street, from Regent avenue to Allston street	9 80	
Salem street, from Potters avenue to Waldo street	1,397 58	
Steere avenue, from Manton avenue to Amherst street	404 58	
Whipple street, from Admiral to Douglas avenue	3,547 48	$32,361 50
Amount carried forward		$66,467 25

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Amount brought forward.....		$66,467 25
PAVE WITH GRANITE BLOCKS.		
Broad street, from Chestnut to Pearl.....	$12,240 52	
Canal street, from Bowen to Smith.....	3,020 10	
Charles street, from Randall square to near Ashburton street.....	84 59	
High street, from Barton to Olneyville square...	12,356 71	
Mathewson street, from Westminster to Washington.....	1,174 65	
Pike street, from Brook to South Main.....	7,292 70	
Point street, from Chestnut to near Beacon avenue.....	14,696 37	
Randall street, from Randall square to North Main street.....	3,117 67	
South Main street, from Planet to James.....	2,600 00	
South Main street, from Transit to India.....	10,099 15	
Steeple street, from Canal to North Main.....	805 51	
Tockwotton street, from East to South Main. ...	7,142 53	
Westminster and Weybosset streets.....	4,927 59	
Wickenden street, from Transit to Brook.....	1,530 56	
		81,088 65
TO BE BUILT.		
Kinsley avenue, from Gaspee street to Hemlock.		242 60
TO BUILD AND CURB.		
Elmwood avenue, from Lexington to the railroad bridge.....		14,513 45
TO BE BROUGHT TO GRADE.		
Butler avenue, from its southerly terminus to North street.....	$9,853 17	
Richardson street, from Prairie avenue to Plain street.....	62 50	
		9,915 67
TAKE POSSESSION, REMOVE OBSTRUCTIONS AND GRADE.		
Bucklin street, from Daboll to Cromwell.....		195 00
TAKE POSSESSION AND REMOVE OBSTRUCTIONS.		
North street, from North Main to Swan Point road.....		1,565 09
REMOVE OBSTRUCTIONS AND RESET CURBING.		
Knight street, from High to Broadway.....		758 15
Amount carried forward.....		$174,745 86

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Amount brought forward.....		$174,745 86
RESET CURBING AND REPAVE GUTTERS.		
Valley street, west side, from driveway near Grove street to opening in curb about 250 feet south of Delaine.....		1,308 14
GRADE AND PUT IN GOOD CONDITION.		
Gordon avenue, from Colfax street to Public...		186 05
CONCRETE SIDEWALKS.		
East, Tockwotton and Wickenden streets, surrounding Tockwotton Park.....		656 11
RESET CURBING, BUILD DRIVEWAY AND CONCRETE SIDEWALK.		
Amherst street, adjoining lot occupied by fire station No. 14.....		154 73
PUT IN GOOD CONDITION.		
Elmwood avenue, from old city line to new city line.....		308 76
		$177,359 65

Bills deposited with the city treasurer for collection from April 1 to June 30, 1893, inclusive, amounted to $453 58

As follows:

Labor and materials.....	$335 58
Manure from barn.....	61 00
Street sweepings.....	54 00
Chopping block.....	3 00
	$453 58

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $466 69

As follows:

Labor and materials.....	$348 69
Manure from barn.....	61 00
Street sweepings.....	54 00
Chopping block.....	3 00
	$466 69

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SIDEWALKS AND CURBING.

The expenditures on account of sidewalks and curbing from April 1 to June 30, 1893, inclusive, were - - - - - - $29,601 35

Classified as follows:

Granite curbing	$29,549 51	
Concreting sidewalks	51 84	
	$29,601 35	

Curbing bills deposited with the city treasurer for collection, from April 1 to June 30, 1893, inclusive, amounted to - - - $12,023 70

During the quarter, coupons from curbing bills collected have been returned by the city treasurer and receipted for, amounting to - $8,619 65

CITY ENGINEER.

Bills approved on account of city engineer's department from April 1 to June 30, 1893, inclusive, amounted to - - - - - $12,583 09

Charged as follows:

Salary—city engineer	$1,500 00	
Salaries of assistants	9,598 08	
Salaries of clerks	705 00	
Horse-car tickets, etc	344 80	
Supplies—drawing materials, etc	319 32	
Instruments and repairs	67 60	
Sundries	36 67	
Horse hire, barn expenses, etc	11 62	
	$12,583 09	

Bills deposited with the city treasurer for collection, from April 1 to June 30, 1893, inclusive, amounted to - - - - $3 80

As follows:

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Steel tapes	$2 00
Draughting paper	70
Set of diagrams	60
Blue prints	50
	$3 80

During the quarter, coupons from bills collected have been returned by the city treasurer and receipted for, amounting to - - $3 30

As follows:

Steel tapes	$2 00
Draughting paper	70
Set of diagrams	60
	$3 30

BRIDGES.

April 26th, the offer of Smith Concrete Co., to repair asphalt driveways of Gaspee street and Randall street bridges, was accepted.

May 1st, the offer of Malden Machine Co., to furnish and erect in place an electrical motor for motive power of draw of Central bridge, was accepted. Amount, $1,295.00.

May 4th, the proposals of R. F. Hawkins, for iron superstructures for bridges, were accepted and contracts subsequently executed, as follows:

Acorn street bridge, over the Woonasquatucket river.
Francis street bridge, over the Woonasquatucket river.

The following work was in progress at the end of the quarter, viz.:

No. of resolution.	Date of approval.	
466.	Aug. 2, 1892,	*Washington bridge over Providence river:*—to build bridge and abutment walls.
641.	Oct. 8, "	*City Dock:*—to purchase materials aud build.
830.	Dec. 20, "	*Francis street bridge over Woonasquatucket river.*

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No. of resolution.	Date of approval.	
832.	Dec. 20, 1892,	*Acorn street bridge over Woonasquatucket river.*

The following work had not commenced June 30, 1893, viz.:

No. of resolution.	Date of approval.	
831.	Dec. 20, 1892,	*Oak street foot-bridge over railroad tracks.*
329.	June 6, 1893,	*Academy avenue bridge over stream between Smith street and Chalkstone avenue.*

Bills approved on account of bridges from April 1 to June 30, 1893, inclusive, amounted to - - - $39,233 34

Charged as follows:

Acorn street bridge—to build	$2,754 99
Barn expenses	85 50
Branch avenue bridge	2 77
Central or Red bridge	268 90
Crawford street bridge	26 00
Delaine street bridge	1 50
Eagle street bridge	2 25
Exchange bridge	57 56
Gaspee street bridge	114 39
Geneva bridge	2 78
Hawkins street bridge	93
Horses, wagons, harnesses, etc	21 25
Hemlock street bridge	7 97
Lumber, hardware, etc	986 68
Park street bridge	76 91
Point street bridge	847 83
Randall street bridge	54 99
Rent of keeper's house, Washington bridge	10 00
Salaries—Central or Red bridge	462 25
Salaries—Point street bridge	978 25
Salaries—Washington bridge	486 25
Smithfield avenue bridge	3 70
Sundries	121 61
Tools	67 38
Amount carried forward	$7,442 64

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Amount brought forward	$7,442 64	
Valley street bridge—north span	39 72	
Valley street bridge—south span	24 11	
Veazie street bridge	5 77	
Wanskuck bridge	5 98	
Washington bridge near India Point	496 33	
Washington bridge over Providence river—to rebuild	30,945 15	
Weybosset bridge	273 64	
	$39,233 34	

Bills approved, from April 1 to June 30, 1893, inclusive, for constructing piers for the Francis street bridge, have been paid from the appropriation for filling the cove basin, to the amount of $989 82

Bills for expenditures for construction of wharf at the new city dock, from April 1 to June 30, 1893, inclusive, have been approved and paid from the appropriation for contingencies, to the amount of - $21,887 22

Bills deposited with the city treasurer for collection, from April 1 to June 30, 1893, inclusive, amounted to - - $9 50

As follows:

Old lumber	$5 50
Sweepings from Washington bridge, near India Point	4 00
	$9 50

During the quarter, coupons from bills collected, have been returned by the city treasurer and receipted for, amounting to $9 50

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As follows:

Old lumber	$5 50
Sweepings from Washington bridge, near India Point	4 00
	$9 50

ROBERT E. SMITH,
Commissioner.

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FORTY-THIRD QUARTERLY REPORT

OF THE

DEPARTMENT OF PUBLIC W

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING SEPTEMBER 30, 1893.

E. A. & R. A. Reid,
Printers and Publishers,
Providence.

CITY PRINTING
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FORTY-THIRD QUARTERLY REPORT

OF THE

DEPARTMENT OF PUBLIC WORKS

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING SEPTEMBER 30, 1893.

J. A. & R. A. Reid, City Printers,
Dyer and Pine Streets.
1893.

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REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., October 1, 1893.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the forty-third quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and the cost of same for the quarter ending September 30, 1893.

WATER WORKS.

August 11th, the proposal of Warren Foundry and Machine Co., of Phillipsburg, N. J., to furnish and deliver about 528 tons of cast-iron water pipes was accepted, and a contract subsequently executed, as follows:

2,500 6-inch B pipe,
300 8-inch B pipe.

Amount, $13,401.04.

August 14th, the offer of the Congdon & Carpenter Co. to furnish and deliver 30,000 pounds Omaha refined pig lead was accepted.

August 30th, the offer of Thomas Phillips & Co. to furnish and deliver 20,000 pounds AAA lead pipe, various sizes, was accepted.

August 30th, the offer of L. H. Tillinghast & Co. to furnish and deliver 20,000 pounds AAA lead pipe, various sizes, was accepted.

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September 13th, the proposal of Henry R. Worthington to furnish and set up, at Pettaconset Pumping Station, a triple expansion pumping engine, capable of pumping fifteen million gallons per day, guaranteed duty one hundred and twenty millions, with two Babcock & Wilcox boilers of 250 h. p. each, for the sum of $70,000.00, was accepted, and a contract was subsequently executed.

The average daily consumption of water during the last quarter was 10,262,825 gallons.

Water pipes were laid during the quarter as follows:

24-INCH.	
In Harris avenue	134.11 feet.
16-INCH.	
In Eagle street	1,078.27 feet.
12-INCH.	
In Harris avenue	12.64 feet.
8-INCH.	
In Camp, Cutler, Julian and Veazie streets, Kinsley, Rochambeau and Woodward avenues; in Woodbine street, Town of Cranston; and in Woonasquatucket avenue, Town of North Providence	6,485.59 feet.
6-INCH.	
In Ambrose, Barstow, Burlington, Cutler, David, Delaine, Elma, Emerson, Fairview, Forest, Frankfort, Gano, Hamilton, Highland, Hillard, Hudson, Lancaster, Matilda, Nashua, Pacific, Parnell, Power, Preston, Thurston, Veazie and Williams streets, Academy, Gordon, Hamilton, Indiana, Massachusetts, Michigan, Morris, New York, Orchard, Rochambeau, Rutherglen, Stamford and Washington avenues, and Hardings alley; in Laban, North and Waterman streets, Town of Johnston; in Byron street, Bluff, Standish, Warwick and Whipple avenues, Town of Cranston; and in Lyman avenue, Town of North Providence	25,480.57 feet.
Total	33,191.18 feet.

or 6.286+ miles.

Water pipes were removed during the quarter as follows:

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16-INCH.

In Eagle street	2.21 feet.

12-INCH.

In East and Harris avenues	15.10 feet.

8-INCH.

In Camp street, Harris and Rochambeau avenues	2,287.78 feet.

6-INCH.

In Eagle street and Lorimer avenue	586.83 feet.
Total	2,891.92 feet,

or .548— miles.

Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.00 feet.
30-inch	59,893.04 feet.
24-inch	43,553.03 feet.
20-inch	9,626.59 feet.
16-inch	33,243.82 feet.
12-inch	76,954.22 feet.
10-inch	14,652.26 feet.
8-inch	222,439.73 feet.
6-inch	951,768.71 feet.
Total	1,422,215.40 feet,

or 269.359— miles.

Thirty-three fire hydrants have been set during the quarter, one in each of the following locations:

Academy avenue, east side, about 450 feet south of Smith street.
Canal street, east side, corner of Smith street.
Canal street, east side, south-east corner of Cady street.
Cent street, south side, corner of South Main street.
College street, north side, near corner of Market square.
Cutler street, north-east corner of Barstow street.
Dorrance street, north-east side, corner of Exchange place.
Eagle street, east side, about 360 feet south of Valley street.
Gordon avenue, east side, at south corner of Reynolds street.
Gordon avenue, east side, at about 190 feet south of Potters avenue.
Hardings alley, north side, corner of South Main street.

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Hopkins street, north side, corner of South Main street.
Kinsley avenue, south side, at the west corner of Harris avenue.
Kinsley avenue, south side, about 450 feet west of Harris avenue.
Matilda street, at north-east corner of Nashua street.
Michigan avenue, east side, at northerly corner of California avenue.
North Main street, east side, opposite Smith street.
North Main street, east side, southerly corner of Bowen street.
North Main street, east side, opposite Otis street.
North Main street, easterly side, corner of South Court street.
North Main street, east side, opposite Amos street.
North Main street. east side, at the north corner of Waterman street.
Orchard avenue, north side, about 320 feet west of Butler avenue.
Orchard avenue, north side, about 300 feet east of Wayland avenue.
Planet street, north side, corner of South Main street.
Rutherglen avenue, north side, about 540 feet west of Alexander street.
South Main street, east side, opposite Custom avenue.
South Main street, east side, opposite Leonard street.
South Water street, east side, near north-east corner of Halsey avenue.
Taber avenue, east side, south-east corner of Irving avenue.
Williams street, north side, at west corner of Roger street.
Williams street, north side, corner of South Main street.
Woodward road, north-east corner of Iowa street.

The total number of fire hydrants is now fifteen hundred and fifty-four: fifteen hundred and five flush and forty-nine post hydrants.

During the quarter three hundred and forty-one water meters were set, of which number seven were to replace other meters. The use of six meters was discontinued.

The following meters were in use at the close of the quarter:

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KIND.	SIZE.							TOTAL
	⅝-in.	¾-in.	1-in.	1¼-in.	2-in.	3-in.	4-in.	
Ball & Fitts, piston	3,064	606	145	35	5			3,855
Ball & Fitts, rotary			22	20	2	5	2	51
Crown.....	5,469	655	174	76	25	10	10	6,419
Fales, Jenks & Sons		1	1					2
Neptune.....	28							28
Thomson.....	1,169	170	42	34	9	3	1	1,428
Worthington.....	6	1			1		1	9
	9,736	1,433	384	165	42	18	14	11,792

One plumber's license was issued during the quarter, making the total number ninety-eight, all of which expire December 31, 1893.

Thirteen hundred and five permits to do plumbing work were issued during the quarter.

Two hundred and fifty-seven applications for water were made during the quarter, making the total number September 30, 1893, nineteen thousand one hundred and forty-two.

The number of new service stops opened during the quarter was two hundred and ninety-six.

The total number of service stops opened to September 30, 1893, inclusive, was eighteen thousand three hundred and ninety-eight. The number in actual use September 30, 1893, was seventeen thousand three hundred and two.

The amount of bills approved on account of water works from July 1 to September 30, 1893, inclusive, was:

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For construction and extension, . . $30,723 87

Classified as follows:

Laying water pipe	$11,298 54	
Fire hydrants, boxes and covers	7,061 80	
Service pipe	1,937 76	
Contract reservations	1,935 84	
Laying service pipe	1,588 78	
Experimental tests of water filtration	1,575 00	
Special castings	1,299 12	
Fruit Hill reservoir, for repairs	1,243 09	
Labor on and carting pipe	798 52	
Cast iron water pipe	709 72	
Taps and stops	261 54	
Sundries	225 23	
Wharf salaries	195 00	
Barn expenses	185 97	
Horses, wagons, harnesses, etc.	180 76	
Tools	152 08	
Fruit Hill reservoir, for construction	75 12	
	$30,723 87	

For maintenance, ... $23,367 9

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$3,855 71	
Firemen	899 33	
Sundries	795 05	
Engineers	513 50	
Superintendence	299 00	
Corliss pumping engine and house	174 43	
Labor on fuel	103 50	
Real estate	97 41	
Oil, waste and packing	93 73	
Care of grounds	93 15	
Lights	62 97	
Barn expenses	42 44	
Cornish pumping engine	28 85	
Cornish engine house	13 30	
Worthington pumping engine	3 75	
		$7,076 1
Amount carried forward		$7,076 1

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Amount brought forward		$7,076 12
Sockanosset Reservoir.		
Watchman	$143 50	
Sundries	41 55	
		185 05
Hope Pumping Station.		
Coal and wood	$2,556 25	
Engineers	575 25	
Firemen	484 60	
Care of grounds	147 00	
Lights	92 00	
Sundries	62 83	
Oil, waste and packing	56 26	
Hope pumping engine, No. 1	41 38	
		4,015 57
Hope Reservoir.		
Sundries	$258 90	
Watchman	218 75	
		477 65
Fruit Hill Reservoir.		
Watchman	$182 00	
Sundries	2 00	
		184 00
Pipe Line and Service Stops.		
Repairs	$1,710 05	
Superintendence—salaries	848 25	
		2,558 30
Meter Department.		
Water meters	$4,534 02	
Setting and repairing meters	1,328 08	
		5,862 10
Miscellaneous.		
Clerks' and inspectors' salaries	$2,340 12	
Prevention of defilement of the Pawtuxet	318 82	
Barn expenses	134 25	
Analyses of water	93 30	
Sundries	45 27	
Horses, wagons, harnesses, etc	39 71	
Public drinking fountains and troughs	30 78	
Pipe yard—office expenses	6 90	
		3,009 15
		$23,367 94

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The amount of expenditures from July 1 to September 30, 1893, inclusive, was . $54,091 81

The total expenditures to September 30, 1893, inclusive, were $7,737,280 19

The *net* expenditure for construction and extension from July 1 to September 30, 1893, inclusive, was..... $29,242 96

The *net* expenditure for construction and extension to September 30, 1893, inclusive, was..... $5,911,658 65

The *net* expenditure for maintenance from July 1 to September 30, 1893, inclusive, was..... $14,345 60

The *net* expenditure for maintenance to September 1, 1893, inclusive, was..... $1,139,673 18

Bills deposited with the city treasurer for collection from July 1 to September 30, 1893, inclusive, amounted to . . . $56,243 92

As follows:

Water.....	$46,047 32
Water meters.....	5,932 50
Setting and repairing meters.....	1,626 00
Rent of real estate.....	232 52
Examination and repairs of pipe line.....	77 58
Permanently closing service stops.....	65 00
Penalties.....	36 00
Sundries.....	75
Labor and material, laying service pipes, etc....	2,200 84
Moving material at pipe yard.....	14 41
Manure from pipe yard barn.....	11 00
	$56,243 92

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to - $61,696 55

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As follows:

Water	$51,152 00
Water meters	5,898 50
Setting and repairing meters	2,804 25
Rent of real estate	210 86
Permanently closing service stops	65 00
Examination and repairs of pipe line	48 28
Penalties	36 00
Sundries	75
Labor and material, laying service pipes, etc.	1,455 50
Moving material at pipe yard	14 41
Manure from pipe yard barn	11 00
	$61,696 55

The amount of bills approved on account of water works for the fiscal year ending September 30, 1893, inclusive, was:

For construction and extension, - - $94,019 43

Classified as follows:

Cast-iron water pipe	$27,048 42
Laying water pipe	24,702 90
Fire hydrants, boxes and covers	7,067 62
Laying service pipe	6,298 50
Special castings	5,444 08
Service pipe	3,848 76
Stop valves	2,844 61
Experimental tests of water filtration	2,710 70
Taps and stops	2,426 65
Contract reservations	1,935 84
Labor on and carting pipe	1,846 23
Rent of wharf and pipe yard	1,500 00
Fruit Hill reservoir, for repairs	1,393 68
Barn at Pettaconset	1,125 00
Tools	1,039 44
Horses, wagons, harnesses, etc	839 25
Barn expenses	784 17
Wharf salaries	760 93
Sundries	225 23
Public drinking fountains and troughs	102 30
Fruit Hill reservoir, for construction	75 12
	$94,019 43

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For maintenance, ... $93,870 30

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$11,640 13	
Firemen	3,195 12	
Sundries	3,166 64	
Engineers	2,059 65	
Superintendence	1,199 29	
Lights	658 57	
Corliss pumping engine and house	644 90	
Real estate	433 67	
Oil, waste and packing	344 92	
Labor on fuel	332 70	
Care of grounds	265 50	
Barn expenses	159 93	
Cornish engine house	41 07	
Cornish pumping engine	30 74	
Worthington pumping engine	12 35	
		$24,185 18

SOCKANOSSET RESERVOIR.

Watchman	$554 50	
Sundries	260 75	
		815 25

HOPE PUMPING STATION.

Coal and wood	$3,058 75	
Engineers	2,307 33	
Firemen	1,747 30	
Lights	437 50	
Care of grounds	314 00	
Sundries	253 06	
Oil, waste and packing	177 53	
Hope pumping engine, No. 2	79 19	
Hope pumping engine, No. 1	72 52	
		$8,447 18

HOPE RESERVOIR.

Watchman	$835 25	
Sundries	766 24	
		1,601 49
Amount carried forward		$35,049 10

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Amount brought forward		$35,049 10
Fruit Hill Reservoir.		
Watchman	$730 00	
Sundries	141 32	
		871 32
Pipe Line and Service Stops.		
Repairs	$7,636 48	
Superintendence—salaries	3,093 62	
		10,730 10
Meter Department.		
Water meters	$19,390 05	
Setting and repairing meters	5,950 87	
		25,340 92
Miscellaneous.		
Clerks' and inspectors' salaries	$9,508 59	
Town of Cranston, tax	6,443 00	
Thawing services, etc	1,585 72	
Prevention of defilement of the Pawtuxet	1,573 83	
Horses, wagons, harnesses, etc	831 36	
Barn expenses	650 62	
Analyses of water	401 15	
Town of North Providence, tax	400 00	
Sundries	187 10	
Public drinking fountains and troughs	122 48	
Pipe yard—office expenses	99 21	
Real estate at Pawtuxet	59 00	
Town of Lincoln, tax	16 80	
		21,878 86
		$93,870 30

SEWERS.

During the quarter ending September 30, 1893, seven hundred and ninety-five permits were issued to drain layers: six hundred and thirty-four for new work, and one hundred and sixty-one for extension and repairs of drains.

Four drain layers' licenses were issued during the quarter, making the total number sixty-one, all of which expire December 31, 1893.

During the quarter assessments for the cost of constructing sewers were certified to the city treasurer, as follows:

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Chalkstone avenue	$8,060 57
Academy avenue, Roanoke street and Belmont avenue	7,749 01
Beaufort street and Academy avenue	5,336 40
Marlborough avenue, Taylor, Glenham and Moore streets	4,496 31
Rathbone street	2,583 78
Hannah street	963 34
Lavaughn street	1,454 98
Audrey street	992 36
Tefft street	1,188 93
Dean and Cedar streets	3,910 71
Douglass street	3,756 42
Mathewson street	539 85
Redwing street	915 95
Oak street	2,296 64
Angell street and Butler avenue	5,401 53
Parade and Susan streets	2,405 66
Whipple street	1,290 09
Pavilion avenue	2,209 00
Gano, East George and Amy streets	9,485 98
Julian street	1,064 95
Congress avenue	3,746 11
Daboll street	6,604 43
Portland street	461 55
Wayland avenue	1,524 41
Potters avenue	3,248 48
Orchard avenue	3,635 65
Penn street	2,600 42
Eddy street and Pavilion avenue	5,739 29
Total	$93,662 80

July 6th, the consent of the Commissioner of Public Works was given for assignments of contracts of William E. Sherman to George R. Newman, as follows:

[The amounts given below are what are estimated will be paid the contractors for labor, and do not include cost of inspection and materials, or rock excavation.]

No. of resolution.	Date of approval.		
317.	May 20, 1893,	*Jessamine, Brattle and Waldo streets,*	$3,234 50
320.	" " "	*Potters avenue and Laura street,*	2,374 60

July 15th, the contract for building the following sewer was awarded, and subsequently executed, namely:

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To J. Frank Read & Co.

No. of resolution.	Date of approval.		
371.	June 16, 1893,	*Vineyard street, from Hawthorne to Potters avenue,* .	$344 60

July 19th, the contract for building the following sewer was awarded, and subsequently executed, namely:

To Everson & Liddle.

No. of resolution.	Date of approval.		
411.	June 30, 1893,	*Tockwotton street, or land owned by the city, from Gano street to the Seekonk river,*	$3,260 00

July 18th, the consent of the Commissioner of Public Works was given to J. Frank Read & Co., relieving them from building a portion of the sewer in South Main and Wickenden streets, under contract dated June 17, 1893. Under date of July 18th a contract for building the above-named portion of sewer was awarded at same prices, and subsequently executed, as follows:

To Everson & Liddle.

No. of resolution.	Date of approval.		
372.	June 16, 1893,	*South Main street, from near Transit to Power,* . . .	$2,928 60

August 24th, contracts for building sewers were awarded and subsequently executed, as follows:

To Frederick E. Shaw.

No. of resolution.	Date of approval.		
368.	June 16, 1893,	*Hope street, from Thayer to Lloyd,* .	$721 70

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To Timothy F. Lyons.

No. of resolution.	Date of approval.		
370.	June 16, 1893,	*Superior and Wendell streets,* . . .	$1,379 30
475.	Aug. 4, "	*Plain street and Thurbers avenue,* .	8,467 00

To George R. Newman.

454.	July 26, 1893,	*Duncan avenue, from Knowles street to North Main,* .	1,200 35
472.	Aug. 4, "	*Adelphi avenue, from Elmgrove to Wayland,* . . .	497 78
473.	" " "	*Cedar street, from Tefft to Acorn,* .	297 22
474.	" " "	*Pacific street, from Broad to Hamilton,*	1,746 37

September 23d, a contract for building the following sewer was awarded, and subsequently executed, namely:

To Frederick E. Shaw.

No. of resolution.	Date of approval.		
512.	Sept. 12, 1893,	*Fountain street, from Jackson to Aborn,*	$1,418 00

During the quarter, the construction of the following sewers was completed, namely:

No. of resolution	Date of approval.		Date of completion.
363.	July 1, 1892,	*Candace, Winsor, Orms, Valley and Smith streets,* .	Aug. 5, 1893.
651.	Oct. 8, "	*Winslow street, from Broad to Weybosset,*	Aug. 7, 1893.

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No. of resolution.	Date of approval.				Date of completion.
654.	Oct.	8,	1892,	*Promenade street, from Rathbone to Gaspee,* . . .	Sept. 5,1893.
179.	Apr.	8,	1893,	*Aleppo street, from Manton avenue to its westerly termination,*	Sept.14,1893.
181.	"	"	"	*Camp street, from near Grandview to Cypress,* . . .	Sept.14,1893.
186.	"	"	"	*Eagle street, from Harris avenue to the river,* . . .	July 22,1893.
187.	"	"	"	*Eddy and Ashmont streets,*	Sept. 1, 1893.
188.	"	"	"	*Elmgrove avenue, from Angell street to Humboldt avenue,*	July 19,1893.
190.	"	"	"	*Julian street, from near Atwells avenue to Amherst street,*	July 11,1893.
191.	"	"	"	*Oak, Willow, Hudson, Wood, Messer, Ellery streets and Chapin avenue,* .	July 19,1893.
194.	"	"	"	*Penn street, from Almy to Vinton,*	July 11,1893.
245.	May	16,	"	*A and Rice streets,*	July 14,1893.
312.	"	20,	"	*Canal street and Canal avenue,* .	Sept. 8,1893.
313.	"	"	"	*Blackstone and Bogman streets,* . .	July 7, 1893.
314.	"	"	"	*Burnside and Briggs streets,* .	Aug.17,1893.

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No. of resolution.	Date of approval.				Date of completion.
316.	May	20,	1893,	*Harris avenue, from Atwells to Eagle street,*	July 22, 1893.
317.	"	"	"	*Jessamine, Brattle and Waldo streets,*	Aug. 2, 1893.
318.	"	"	"	*Hospital street, from Point to Manchester,*	July 1, 1893.
320.	"	"	"	*Potters avenue and Laura street,* .	Aug. 17, 1893.
322.	"	"	"	*Sabin street, from Aborn to Cove,* .	Aug. 26, 1893.
323.	"	"	"	*Stampers street, from North Main to Hewes,* . .	Aug. 9, 1893.
324.	"	"	"	*Williams, Fremont, East Transit and Preston streets,* .	Sept. 8, 1893.
352.	June	6,	"	*Hawes and Quade streets,* . . .	July 13, 1893.
369.	"	16,	"	*Matheuson street, from Fountain to Cove,*	Aug. 26, 1893.
370.	"	"	"	*Superior and Wendell streets,* . .	Sept. 14, 1893.
371.	"	"	"	*Vineyard street, from Hawthorne to Potters avenue,* .	July 22, 1893.
472.	Aug.	4,	"	*Adelphi avenue, from Elmgrove to Wayland,* . .	Sept. 13, 1893.
473.	"	"	"	*Cedar street, from Tefft to Acorn,* .	Sept. 8, 1893.
474.	"	"	"	*Pacific street, from Broad to Hamilton,*	Sept. 28, 1893.

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At the close of the quarter, work upon the following sewers of the improved sewerage system was in progress, namely:

No. of resolution.	Date of approval.			
652.	Oct.	8,	1892,	*Gaspee and Cove streets.*
653.	"	"	"	*Dorrance street, from Cove to Dyer.*
138.	Mar.	21,	1893,	*Norfolk and Station streets, Huntington avenue, Chambers and Burrington streets.*
411.	June	30,	"	*Tockwotton street, or land owned by the city, from Gano street to the Seekonk river.*

Work upon the following lateral sewers was in progress at the close of the quarter, namely:

No. of resolution.	Date of approval.			
180.	Apr.	8,	1893,	*Balch street, Pacific and Hamburg avenues.*
244.	May	16,	"	*Jillson and Eddy streets.*
311.	"	20,	"	*Camp, North and North Main streets.*
315.	"	"	"	*East avenue, from Pleasant street to Olney.*
368.	June	16,	"	*Hope street, from Thayer to Lloyd.*
372.	"	"	"	*Wickenden, South Main and Crawford streets.*
454.	July	26,	"	*Duncan avenue, from Knowles street to North Main.*
475.	Aug.	4,	"	*Plain street and Thurbers avenue.*

Work upon the following sewers, completing the work ordered by the city council, had not commenced September 30, 1893, namely:

No. of resolution.	Date of approval.			
512.	Sept.	12,	1893,	*Fountain street, from Jackson to Aborn.*
544.	"	23,	"	*Grove, Helme and River streets.*

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No. of resolution.	Date of approval.	
545.	Sept. 23, 1893,	*Inkerman street, from Candace to Pekin.*
546.	" " "	*Jewett and Senter streets.*
547.	" " "	*Lilac street, from Cranston to Salem.*
548.	" " "	*Moore street, from Updike to Elmwood avenue.*
549.	" " "	*Potter street, from near Weybosset to Pine.*
550.	" " "	*Rhodes and Eddy streets.*
564.	" " "	*Dyer and Eddy streets, and Allens avenue.*

The amount of bills approved on account of sewers from July 1 to September 30, 1893, inclusive, was:

FOR CONSTRUCTON:		
Regular appropriation	$104,956 37	
Improved sewerage appropriation	182,041 10	
		$286,997 47

Charged as follows:

Materials	$36,743 99
Contract reservations	9,344 00
Salaries of assistant engineers	2,971 50
Additional catch-basins	1,204 80
Clerks' salaries	1,000 40
Sundries—improved sewerage system	806 65
Rent of wharf and pipe yard	750 00
Testing cement	513 20
Sundries	419 81
Tools	15 86
Sewer in A and Rice streets	1,290 75
Sewer in Adelphi avenue, from Elmgrove to Wayland	501 48
Sewer in Balch street, Pacific and Hamburg avenues	4,101 95
Sewer in Blackstone and Bogman streets	1,164 10
Sewer in Burnside and Briggs streets	3,801 06
Amount carried forward	$64,629 55

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Amount brought forward	$64,629 55
Sewer in Camp street, from near Grandview to Cypress	4,609 22
Sewer in Camp, North and North Main streets.	3,542 21
Sewer in Candace, Winsor and Orms streets, etc.	3,051 61
Sewer in Cedar street, from Tefft to Acorn	288 85
Sewer in Congress avenue, from Elmwood to Hamilton street	15 17
Sewer in Daboll street, from Dexter to Public.	29 24
Sewer in Duncan avenue, from Knowles street to North Main	20 80
Sewer in Eagle street, from Harris avenue to the river	2,528 01
Sewer in East avenue, from Pleasant street to Olney	2,093 04
Sewer in Eddy and Ashmont streets	8,312 99
Sewer in Elmgrove avenue, from Angell street to Humboldt avenue	1,037 58
Sewer in Elmwood avenue, from Lexington to railroad bridge south of Roger Williams avenue.	61 51
Sewer in Gano, East George and Amy streets	571 97
Sewer in Harris avenue, from Atwells to Eagle street	1,312 71
Sewer in Hawes and Quade sreets	933 45
Sewer in Hope street, from Thayer to Lloyd	1,172 05
Sewer in Hospital street, from Point to Manchester	19 25
Sewer in Jessamine, Brattle and Waldo streets.	3,543 56
Sewer in Jillson and Eddy streets	2,281 17
Sewer in Julian street. from near Atwells avenue to Amherst street	1,785 09
Sewer in Manton avenue, from near Florence street to Woonasquatucket river	1,912 13
Sewer in Mathewson street, from Fountain to Cove	827 52
Sewer in Oak, Willow and Hudson streets, etc.	5,282 45
Sewer in Pacific street, from Broad to Hamilton	1,902 07
Sewer in Penn street, from Almy to Vinton	620 46
Sewer in Plain street, and Thurbers avenue	2,109 21
Sewer in Potters avenue, and Laura street	2,670 99
Sewer in Sabin street, from Aborn to Cove	2,074 30
Sewer in Stampers street, from North Main to Hewes	1,225 56
Amount carried forward	$120,463 72

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Amount brought forward	$120,463 72	
Sewer in Superior and Wendell streets	1,393 87	
Sewer in Vineyard street, from Hawthorne to Potters avenue	362 73	
Sewer in Wickenden, South Main and Crawford streets	1,091 93	
Sewer in Williams, Fremont, East Transit and Preston streets	3,131 19	
Sewer in Winslow street, from Broad to Weybosset	421 56	
Sewer in Aleppo street, from Manton avenue to its westerly termination	10,128 23	
Sewer in Canal street and Canal avenue	32,455 33	
Sewer in Dorrance street, from Cove to Dyer	30,361 64	
Sewer in Gaspee and Cove streets	27,666 69	
Sewer in Norfolk and Station streets	25,354 52	
Sewer in Promenade street, from Rathbone to Gaspee	29,401 73	
Sewer in Tockwotton street, or land owned by the city, from Gano easterly to the Seekonk river	4,760 33	
Sewer in Valley street, from Eagle to Rathbone	4 00	
	$286,997 47	

For maintenance, ... $10,665 72

Charged as follows:

Cleaning basins and sewers	$4,510 99
Repairing basins and sewers	2,101 56
Inspection of connections	1,394 08
Cleaning and repairing old drains	1,061 31
Horses, wagons, harnesses, etc	449 12
Tools	401 91
Salary—superintendent	390 00
Barn expenses	221 61
Cleaning private connections	87 69
Sundries	41 45
Filling cisterns, etc	6 00
	$10,665 72

The *net* expenditure for construction of sewers to September 30, 1893, inclusive, was $4,281,181 32

The *net* expenditure for maintenance of sewers to September 30, 1893, inclusive, was 396,270 18

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Bills deposited with the city treasurer for collection from July 1 to September 30, 1893, inclusive, amounted to - - - $528 05

As follows:

Cleaning private connections	$107 25	
Repairing private drains	84 14	
Repairing sewer	20 85	
Filling cisterns, etc	11 25	
Laying drains to curbstone	301 22	
Testing cement	2 80	
Sewer material	54	
	$528 05	

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to - $1,144 67

As follows:

Repairing private drains	$104 99	
Cleaning private connections	90 75	
Filling cisterns, etc	11 25	
One Carson engine and boiler	650 00	
Laying drains to curbstone	284 34	
Testing cement	2 80	
Sewer material	54	
	$1,144 67	

The amount of bills approved on account of sewers for the fiscal year ending September 30, 1893, inclusive, was:

For Construction:

Regular appropriation	$366,867 48	
Improved sewerage appropriation	426,875 22	
		$793,742 70

Charged as follows:

Materials	$106,640 51
Contract reservations	30,893 63
Amount carried forward	$137,534 14

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Amount brought forward	$137,534 14
Salaries of assistant engineers	10,626 69
Clerks' salaries	4,166 68
Sundries, improved sewerage system	4,090 24
Additional catch basins	2,333 43
Testing cement	1,763 93
Sundries	1,648 15
Rent of wharf and pipe yard	1,500 00
Tools	49 12
Sewer in A and Rice streets	1,290 75
Sewer in Adelaide avenue, from Melrose street to summit east of Elmwood avenue	192 27
Sewer in Adelaide avenue, from summit west of Melrose street to Elmwood avenue	1,225 32
Sewer in Adelphi avenue, from Elmgrove to Wayland	501 48
Sewer in Allston street, and Regent avenue	450 16
Sewer in Angell street, and Butler avenue	3,162 78
Sewer in Atwells avenue, from summit west of Covell street to Putnam	6,251 78
Sewer in Audrey street, from Bowdoin to Delaine	822 21
Sewer in Balch street, Pacific and Hamburg avenues	4,101 95
Sewer in Bernon street, from Douglas avenue to Nolan street	1,749 76
Sewer in Blackstone and Bogman streets	3,039 01
Sewer in Blackstone street, from Prairie avenue to Plain street	2,090 81
Sewer in Branch avenue, North Main street, Livingston avenue and Whelden street	1,730 41
Sewer in Bucklin street and Potters avenue	2,243 70
Sewer in Burnside and Briggs streets	3,801 06
Sewer in Cambridge street, and Academy avenue	30 19
Sewer in Camp street, from near Grandview to Cypress	4,609 22
Sewer in Camp, North and North Main streets	3,542 21
Sewer in Candace, Winsor and Orms streets, etc	14,644 25
Sewer in Cedar street, from Tefft to Acorn	288 85
Sewer in Chalkstone avenue, from Douglas to Candace street	882 05
Sewer in Chalkstone avenue, from Harold street to Claremont avenue	19 96
Sewer in Chalkstone avenue, from 50 feet west of Pekin street to Candace	900 78
Amount carried forward	$221,283 34

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Amount brought forward	$221,283 34
Sewer in Common and Carroll streets	1,017 79
Sewer in Congress avenue, from Elmwood to Hamilton street	1,658 24
Sewer in Cromwell street, from Greenwich to Dexter	926 55
Sewer in Cypress street, from a point 235 feet east of Ivy to Camp	4,865 83
Sewer in Daboll street, from Dexter to Public	2,845 05
Sewer in Dean and Cedar streets	2,993 75
Sewer in Diamond street, from Cranston to Superior	1,441 43
Sewer in Douglass street, from Gano to Butler avenue	2,001 38
Sewer in Duncan avenue, from Knowles street to North Main	20 80
Sewer in Eagle street, from Harris avenue to the river	10,013 79
Sewer in East avenue, from Pleasant street to Olney	2,093 04
Sewer in Eddy and Ashmont streets	9,247 97
Sewer in Eddy street and Pavilion avenue	3,471 50
Sewer in Elmgrove avenue, from Angell street to Humboldt avenue	1,037 58
Sewer in Elmwood avenue, from Lexington to railroad bridge south of Roger Williams avenue	13,008 39
Sewer in Gano, East George and Amy streets	9,807 98
Sewer in Glenham, Taylor and Public streets	1,825 01
Sewer in Grant street, from Carpenter to Knight	1,019 89
Sewer in Hannah street, from Amsterdam to Amherst	1,583 76
Sewer in Harris avenue, from Atwells to Eagle street	1,312 71
Sewer in Hawes and Quade streets	1,611 10
Sewer in Hendrick and Carleton streets	2,063 69
Sewer in High, Norfolk, Oak and Troy streets	34,267 85
Sewer in High street, from Norfolk to railroad bridge	236 08
Sewer in High street, from railroad bridge to end of sewer near Broadway	521 61
Sewer in Hope street, from Thayer to Lloyd	1,172 05
Amount carried forward	$333,348 16

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Amount brought forward	$333,348 16
Sewer in Hospital street, from Point to Manchester	374 84
Sewer in Jessamine, Brattle and Waldo streets	3,543 56
Sewer in Jillson and Eddy streets	2,281 17
Sewer in Julian street, from near Atwells avenue to Amherst street	1,804 62
Sewer in Kossuth street, from Putnam to Bowdoin	118 88
Sewer in Lavaughn street, from Atwells avenue to Amherst street	1,684 63
Sewer in Lexington avenue, from Melrose street to Hamilton	1,211 01
Sewer in Lexington avenue, from about 200 feet west of Melrose street to Elmwood avenue	486 76
Sewer in Manton avenue, from near Florence street to Woonasquatucket river	12,904 72
Sewer in Marlborough avenue, Taylor, Glenham and Moore streets	2,035 42
Sewer in Mathewson street, from Fountain to Cove	827 52
Sewer in Mathewson street, from Washington to Fountain	449 64
Sewer in Mawney and Updike streets	2,983 90
Sewer in Moore and Broad streets	1,049 72
Sewer in Oak street, from Messer to Norfolk	1,068 49
Sewer in Oak, Willow and Hudson streets, etc.	13,818 24
Sewer in Orchard avenue, from Wayland to Butler	1,261 73
Sewer in Oxford street, from about 80 feet east of Harriet to Prairie avenue	557 06
Sewer in Pacific street, from Broad to Hamilton	1,902 07
Sewer in Parade and Susan streets	1,456 79
Sewer in Pavilion avenue, from Prairie to Ocean street	858 41
Sewer in Penn street, from Almy to Vinton	1,468 63
Sewer in Plain street, from Public to Bishop	1,060 44
Sewer in Plain street, and Thurbers avenue	2,109 21
Sewer in Pope street, from Amherst to Manton avenue	1,455 87
Sewer in Portland street, from Hayward to Broad	314 05
Sewer in Potters avenue, from Broad street to Prairie avenue	1,526 31
Amount carried forward	$393,961 85

Digitized by Google

Amount brought forward	$393,961 85
Sewer in Potters avenue, from Greenwich street to Hamilton	1,350 59
Sewer in Potters avenue, and Laura street	2,670 99
Sewer in Potters avenue, from Prairie to Ocean street	1,165 91
Sewer in Princeton avenue and Broad street	1,631 57
Sewer in Providence street, from Prairie avenue to Lockwood street	532 18
Sewer in Public street, from Gordon avenue to Prairie	414 93
Sewer in Public street, from Ocean to Plain	992 82
Sewer in Putnam street, from Amherst to Kossuth	829 90
Sewer in Redwing street, from Bucklin to its westerly termination	429 28
Sewer in Redwing street, from Greenwich to Bucklin	435 41
Sewer in Regent avenue, and Allston street	814 91
Sewer in Ring street, from Almy to Courtland	603 47
Sewer in Robin street, Regent avenue and Cornell street	1,549 31
Sewer in Sabin street, from Aborn to Cove	2,074 30
Sewer in Salem street, from Waldo to Potters avenue	965 09
Sewer in Somerset street, from Tanner to Prairie avenue	778 08
Sewer in Stampers street, from North Main to Hewes	1,225 56
Sewer in Steere avenue, from Amherst street to Manton avenue	1,663 23
Sewer in Steuben street, from Atwells avenue to Manton	550 46
Sewer in Superior street, from Cranston to Dexter	710 64
Sewer in Superior and Wendell streets	1,393 87
Sewer in Tanner street, from Pearl to Somerset	796 15
Sewer in Tefft street, from Atwells avenue to West Exchange street	762 34
Sewer in Vineyard street, from Hawthorne to Potters avenue	362 73
Sewer in Wayland avenue, from Angell street to Humboldt avenue	873 14
Amount carried forward	$419,538 71

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Amount brought forward	$419,538 71
Sewer in Whipple street, from Douglas avenue to end of present sewer	776 47
Sewer in Wickenden, South Main and Crawford streets	1,091 93
Sewer in Williams, Fremont, East Transit and Preston streets	3,131 19
Sewer in Winslow street, from Broad to Weybosset	503 46
Sewer in Aleppo street, from Manton avenue to its westerly termination	16,376 67
Sewer in Canal street and Canal avenue	32,455 33
Sewer in Canal street, from Steeple to Market square	8,818 60
Sewer in Delaine and Valley streets	29,787 73
Sewer in Disposal Division, Section 1	80 30
Sewer in Dorrance street, from Cove to Dyer	54,837 65
Sewer in Elmwood Division, Section 2	21 17
Sewer in Elmwood Division, Section 6	9,301 97
Sewer in Elmwood Division, Section 8	4,824 96
Sewer in Elmwood Division, Section 9	1,303 31
Sewer in Gaspee and Cove streets	27,666 69
Sewer in Gordon avenue, etc., Elmwood Division	35 83
Sewer in Norfolk and Station streets	25,724 16
Sewer in Promenade street, from Rathbone to Gaspee	71,254 47
Sewer in Tockwotton street, or land owned by the city, from Gano easterly to the Seekonk river	4,760 33
Sewer in Valley and Eagle streets	6,474 02
Sewer in Valley street, from Eagle to Rathbone	52,008 99
Sewer from Valley street to Woonasquatucket river	20,975 25
Grading Ernest street, from Eddy to Allens avenue	1,993 51
	$793,742 70

For maintenance, - - - - $34,336 9

Charged as follows:

Cleaning basins and sewers	$12,177 58
Repairing basins and sewers	7,296 58
Amount carried forward	$19,474 16

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Amount brought forward	$19,474 16
Inspection of connections	4,132 70
Cleaning and repairing old drains	3,440 73
Tools	1,898 79
Horses, wagons, harnesses, etc.	1,877 39
Salary—superintendent	1,564 29
Barn expenses	1,186 23
Cleaning private connections	384 69
Sundries	210 57
Filling cisterns, etc.	167 39
	$34,336 94

HIGHWAYS.

Three permits to open streets were issued during the quarter.

July 12th, the offer of Rhode Island Concrete Co., to fill the joints of pavements in Weybosset and Westminster streets with concrete mixture, was accepted.

September 2d, the offer of the New England Steam Brick Co., to furnish and deliver 250,000 vitrified paving bricks for paving Mathewson and Eagle streets, was accepted.

September 7th, the offer of Rhode Island Concrete Co., to fill the joints of the brick pavement in Harkness Court and Mathewson street with concrete, was accepted.

During the quarter statements of the cost of concreting sidewalks, with ten per centum added to cover the cost of assessing and collecting, were certified to the assessors of taxes, viz.:

West Friendship street, from Elmwood avenue to Broad street $21 03

During the quarter the following work was completed:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
Oct. 20, 1892,	*Whipple street, from Admiral to Douglas avenue.*

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Date of order.			
Oct.	20,	1892,	*Douglass street, from Ives to Butler avenue.*
Nov.	17,	"	*Robin street, from Regent avenue to Allston street.*
"	23,	"	*Regent avenue, from River to Cornell street.*
"	"	"	*Cornell street, from Regent avenue to Valley street.*
Feb.	16,	1893,	*Ashmont street, from Ocean to Eddy.*
Mar.	"	"	*Kossuth street, from Hyat to Pope.*
"	"	"	*Wood street, from Messer to Ellery.*
"	"	"	*Julian street, from Amherst to Atwells avenue.*
"	"	"	*Allston street, from River avenue to Cornell street.*
"	"	"	*Butler avenue, from Elton street to North.*
April	20,	"	*Dexter street, from Cromwell to Potters avenue.*
"	"	"	*Marlborough avenue, from Broad street to Taylor.*
"	"	"	*Lexington avenue, from Elmwood to Melrose street.*
June	15,	"	*Bucklin street, from Burnett to Oakland.*
"	"	"	*Gano street, from Pitman to Tockwotton.*
"	"	"	*Mallett street, from Olney to Bates.*
"	"	"	*Orchard avenue, from Wayland to Butler.*
"	"	"	*Parnell street, from Atwells avenue to its northerly termination.*
"	29,	"	*Butler avenue, from Orchard to Elton street.*

TO TAKE POSSESSION AND PUT IN SAFE CONDITION.

Nov.	17,	1892,	*Aleppo street, from Manton avenue to property of the Riverside Mills.*

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To Take Possession.

Date of order.	
May 18, 1893,	*Smith street, from River avenue to city line.*
June 15, "	*Norfolk street, Huntington avenue and Chambers street.*
July 10, "	*Veazie street, from Douglas avenue (near Stansbury street) to Branch avenue.*

To Build and Curb.

No. of resolution.	Date of approval.	
725.	Nov. 17, 1892,	*Elmwood avenue, from Lexington to the railroad bridge.*

To Grade and Put in Good Condition.

590.	Sept. 20, 1892,	*Butler avenue, from its southerly terminus to North street.*
402.	June 27, 1893,	*Butler avenue, from its southerly terminus to North street.*
	July 20, "	*Hall street, from Ledge about 150 feet southerly.*

To Curb Sidewalks.

304.	May 20, 1893,	*Niagara street, adjoining school estate; Wendell street and Messer court, adjoining the Messer street school estate.*

To be Paved with Granite Blocks.

611.	Sept. 22, 1892,	*High street, from Barton to Olneyville square.*
671.	Oct. 22, "	*Manton avenue, from Chaffee street to Florence.*
724.	Nov. 17, "	*Charles street, from Randall square to near Ashburton street.*

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No. of resolution.	Date of approval.			
265.	May	17.	1893.	*Randall street, from Randall square to North Main street.*
265.	"	"	"	*Steeple street, from Canal to North Main.*
265.	"	"	"	*Matheuson street, from Westminster to Washington.*
265.	"	"	"	*Wickenden street, from Transit to Brook.*
265.	"	"	"	*Westminster and Weybosset streets, from Weybosset bridge to Dorrance street.*
430.	July	11.	"	*Page street, from Weybosset to Pine.*

To be Paved with Bricks.

610.	Sept.	22.	1892.	*Eagle street, from Harris avenue to Kinsley.*
265.	May	17.	1893.	*Weybosset street, from Custom House to Post-office court.*
265.	"	"	"	*Matheuson street, from Washington to Cove.*
467.	Aug.	4.	"	*Harkness court, from Pine street to Weybosset.*

To be Repaired.

487.	"	"	1893.	*Ashmont street, northerly side, between Ocean street and Oxford lane.*

To Concrete Sidewalks.

495.	"	"	1893.	*West Friendship street, from Elmwood avenue to Broad street.*

The following work was in progress September 30, 1893, viz.:

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SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
June 15, 1893,	*North street, from North Main to Swan Point road:*—in process.
" " "	*Veazie street, from Douglas avenue to Branch:*—in process.

TO TAKE POSSESSION, REMOVE OBSTRUCTIONS AND GRADE.

June 2, 1892,	*Bucklin street, from Daboll to Cromwell:*—in process.

TO GRADE AND PUT IN GOOD CONDITION.

June 15, 1893,	*Gordon avenue from Colfax street to Public:*—in process.

TO BE PAVED WITH GRANITE BLOCKS.

No. of resolution.	Date of approval.	
265.	May 17, 1893,	*Canal street, from Bowen to Smith:*—nearly completed.

TO MACADAMIZE.

303.	" 20, 1893,	*Smith street, from River avenue to city line:*—nearly completed.

TO GRADE AND PUT IN GOOD CONDITION.

429.	July 11, 1893,	*Academy avenue, from Chalkstone to Smith street:*—nearly completed.

The following work, ordered by the board of aldermen and city council, had not commenced September 30, 1893, viz.:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
Sept. 21, 1893,	*Charles street, from West River to Branch avenue.*

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Date of order.	
Sept. 21, 1893,	*Aleppo street, from Manton avenue to its westerly termination.*
" " "	*Balch street, from Pacific avenue to Jackson.*
" " "	*Congdon street, from Halsey to the north side of Hidden.*
" " "	*Daboll street, from Bucklin to Dexter.*
" " "	*Dean street, from Atwells avenue to Cedar street.*
" " "	*Grove street, from Harris avenue to Valley street.*
" " "	*Hamburg avenue, from Burrington street to Pacific avenue.*
" " "	*Langdon street, from Sherman to Hagan.*
" " "	*Pacific avenue, from Hamburg to Balch street.*
" " "	*River street, from Grove to the Woonasquatucket river.*
" " "	*Unit street, from Maynard to Atwells avenue.*

TO TAKE POSSESSION, GRADE AND PUT IN GOOD CONDITION.

Sept. 7, 1893,	*Harris avenue, from Acorn street to Kinsley avenue.*

TO BE PAVED WITH GRANITE BLOCKS.

No. of resolution.	Date of approval.	
265.	May 17, 1893,	*South Main street, from Planet to James.*

TO BUILD AND CURB.

780.	Dec. 3, 1892,	*Gaspee street, from Cove to Promenade.*

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To Construct Channel for Storm Water.

No. of resolution.	Date of approval.	
331.	June 6, 1893,	*Vale street, across Danforth street on to the land owned by the city.*

To Repair.

543.	Sept. 23, 1893,	*Stewart street, from Westminster to Broad.*
567.	" " "	*Sixth Police District, sidewalks around poles of Police Signal System.*

Bills approved on account of highways from July 1 to September 30, 1893, inclusive, amounted to:

Regular appropriation	$ 49,210 22	
Special appropriation	141,370 22	
		$190,580 44

Classified as follows:

Cleaning streets	$16,695 81	
Crushed stone—material and labor	10,836 60	
Repairs on unpaved streets	9,941 25	
Barn expenses	2,324 76	
Blacksmith and wheelwright shop	2,063 75	
Tools, implements, etc	1,191 61	
Sundries	885 17	
Salaries—superintendent and clerks	741 00	
Horses, wagons, harnesses, etc	653 13	
Repairs on paved streets	625 46	
Steam rollers—repairs and supplies	621 65	
Building driveways, etc	540 56	
Repairs on stone crushers	451 13	
Labor on materials	330 80	
Watering streets	229 50	
Watchman at city yard	220 50	
Fencing streets—material and labor	53 46	
Repairing sidewalks and driveways, opposite public buildings	17 83	
Telephone lines	75	
		$48,424 72
Amount carried forward		$48,424 72

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Amount brought forward.....		$48,424 73

New Work—Building and Rebuilding Streets, Etc.

Sidewalks Curbed and Gutters Paved.

Allston street, from River avenue to Cornell street.....	$1,458 00	
Arlington avenue, east side, from Angell street to Irving avenue.....	166 10	
Ashmont street, from Ocean to Eddy.....	2,552 32	
Bucklin street, from Burnett to Oakland.....	468 22	
Cornell street, from Regent avenue to Valley street.....	1,593 16	
Dexter street, from Cromwell to Potters avenue	7,745 55	
Douglass street, from Ives to Butler avenue...	3,664 60	
Gano street, from Pitman to Tockwotton.....	8,189 71	
Julian street, from Amherst to Atwells avenue.	1,245 20	
Kossuth street, from Hyat to Pope.....	520 47	
Lexington avenue, from Elmwood to Melrose street.....	1,744 27	
Mallett street, from Olney to Bates.....	743 42	
Marlborough avenue, from Broad street to Taylor.....	2,727 76	
North street, from North Main to Swan Point road.....	2,892 70	
Orchard avenue, from Wayland to Butler.....	2,597 48	
Parnell street, from Atwells avenue to its northerly termination.....	2,268 28	
Regent avenue, from River to Cornell street...	1,883 75	
Robin street, from Regent avenue to Allston street.....	930 78	
Veazie street, from Douglas avenue to Branch.	2,002 48	
Whipple street, from Admiral to Douglas avenue	2,388 25	
Wood street, from Messer to Ellery.....	1,028 58	
		48,761 08

Pave with Granite Blocks.

Broad street, from Chestnut to Pearl.....	$ 85 35	
Canal street, from Bowen to Smith.....	693 07	
Charles street, from Randall square to near Ashburton street.....	4,035 59	
High street, from Barton to Olneyville square..	9,486 88	
Manton avenue, from Chaffee street to Florence	5,052 49	
Mathewson street, from Westminster to Washington.....	1,164 58	
Amounts carried forward.....	$20,517 96	$97,185 [illegible]

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Amounts brought forward	$20,517 96	$97,1858 0
Page street, from Weybosset to Pine	2,304 58	
Randall street, from Randall square to North Main street	2,410 10	
South Main street, from Transit to India	1,909 09	
Steeple street, from Canal to North Main	1,198 02	
Westminster and Weybosset streets	8,180 15	
Wickenden street, from Transit to Brook	10,253 74	
		46,773 64
PAVE WITH BRICKS.		
Eagle street, from Harris avenue to Kinsley	$4,182 17	
Harkness court, from Pine street to Weybosset	1,953 39	
Mathewson street, from Washington to Cove	4,423 02	
Weybosset street, from Custom House to Post-office court	1,465 42	
		12,024 00
TO BE BUILT.		
Elmwood avenue, from Lexington to the railroad bridge		13,211 91
TO BE BROUGHT TO GRADE.		
Butler avenue, from its southerly terminus to North street		13,722 15
TAKE POSSESSION, REMOVE OBSTRUCTIONS AND GRADE.		
Bucklin street, from Daboll to Cromwell		461 60
GRADE AND PUT IN GOOD CONDITION.		
Academy avenue, from Chalkstone to Smith street	$3,381 61	
Gordon avenue, from Colfax street to Public	672 50	
Hall street, from Ledge about 150 feet southerly.	78 00	
		4,132 11
MACADAMIZE.		
Smith street, from River avenue to city line		3,034 23
TAKE POSSESSION.		
Kossuth street, from Hyat to Pope		35 00
		$190,580 44

Bills deposited with the city treasurer for collection from July 1 to September 30, 1893, inclusive, amounted to - - - $17,172 44

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As follows:

Union Railroad Company, for granite blocks, etc.	$16,168 14
Labor and materials	866 70
Manure from barn	62 00
Street sweepings	60 00
Removing trees	11 10
Two paving hammers	3 50
Chopping block	1 00
	$17,172 44

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to - $11,053 11

As follows:

Union Railroad Company, for granite blocks, etc.	$10,131 14
Labor and materials	786 97
Manure from barn	62 00
Street sweepings	60 00
Removing trees	8 50
Two paving hammers	3 50
Chopping block	1 00
	$11,053 11

Bills approved on account of highways for the fiscal year ending September 30, 1893, inclusive, amounted to:

Regular appropriation	$185,729 55	
Special appropriation	405,569 49	
		$591,299 04

Classified as follows:

Cleaning streets	$47,581 70
Repairs on unpaved streets	35,893 72
Removing snow and ice	15,250 52
Screening gravel	14,280 88
Crushed stone—material and labor	12,435 04
Amount carried forward	$125,441 86

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Amounts brought forward	$125,441 86	
Barn expenses	10,120 48	
Tools, implements, etc.	7,931 08	
Blacksmith and wheelwright shop	5,989 84	
Horses, wagons, harnesses, etc.	3,985 09	
Salaries—superintendent and clerks	2,972 15	
Steam rollers—repairs and supplies	2,826 79	
Labor on materials	2,581 09	
Repairs on paved streets	2,416 39	
Repairs on stone crushers	1,643 21	
Sundries	1,484 54	
Watering streets	877 28	
Building driveways, etc.	797 90	
Watchman at city yard	661 50	
Fencing streets—material and labor	289 67	
Contract reservations	165 00	
Repairing sidewalks and driveways opposite public buildings	126 38	
Office expenses, city yard	83 40	
Stone—paving and crosswalk	12 30	
Telephone lines	75	
		$170,406 70

New Work—Building and Rebuilding Streets, Etc.

Sidewalks Curbed and Gutters Paved.

Allston street, from River avenue to Cornell street	$1,464 00	
Arlington avenue, east side, from Angell street to Irving avenue	5,302 94	
Arnold street, from Brook to Thayer	448 71	
Ashburton street, from Charles to Tremont	2,184 36	
Ashmont street, from Ocean to Eddy	2,552 32	
Blackstone street, from Prairie avenue to Plain street	3,554 44	
Bucklin street, from Burnett to Oakland	468 22	
Cambridge street, from Academy avenue to Sears.	892 35	
Carleton street, from Yale avenue to Beaufort street	1,669 02	
Chalkstone avenue, from Mt. Pleasant to Academy	2,013 14	
Claremont avenue, from Roanoke street to Chalkstone avenue	21 40	
Amounts carried forward	$20,570 90	$170,406 70

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Amounts brought forward	$20,570 90	$170,406 70
Colfax street, from Plain to Broad	431 28	
Congdon street from Halsey to Jenckes	162 30	
Cornell street, from Regent avenue to Valley street	1,700 08	
Delaine street, from the Woonasquatucket river to Valley street	2,371 24	
Dexter street, from Cromwell to Potters avenue	8,184 34	
Douglass street, from Ives to Butler avenue	6,339 78	
Gallup street, from Prairie avenue to Broad street	545 87	
Gano street, from Pitman to Tockwotton	9,489 71	
Gardner street, from Camp to Knowles	1,215 58	
Harris avenue, from Broadway to Atwells avenue	911 93	
Hemlock street, from Valley to Woonasquatucket river	79 12	
Hyat street, from Kossuth to Manton avenue	1,272 94	
Ives street, from Power to Pitman	469 69	
Julian street, from Amherst to Atwells avenue	2,207 25	
Knowles street, from Cypress to Abbott	543 87	
Knowles street, from Pleasant to Cypress	2,035 22	
Kossuth street, from Hyat to Pope	585 97	
Langdon street, from Branch avenue to Sherman street	1,332 11	
Lexington avenue, from Elmwood to Melrose street	2,405 15	
Lexington avenue, from Melrose street to Hamilton	1,665 56	
Linwood avenue, from Cranston street to Dexter	4,602 78	
Livingston avenue, from North Main street to Printery	1,481 08	
Mallett street, from Olney to Bates	743 42	
Marlborough avenue, from Broad street to Taylor	3,702 48	
Mawney street, from Bucklin to Dexter	1,597 72	
Miner street, from Oxford to Fruit	24 41	
North street, from North Main to Swan Point road	2,892 70	
Orchard avenue, from Wayland to Butler	2,597 48	
Parnell street, from Atwells avenue to its northerly termination	2,268 28	
Pope street, from Manton avenue to Amherst street	1,307 34	
Amounts carried forward	$85,737 58	$170,406 70

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Amounts brought forward	$85,737 58	$170,406 70
Princeton avenue, from Greenwich street to Bucklin	2,611 32	
Regent avenue, from River avenue to Cornell street	1,907 35	
Robin street, from Regent avenue to Allston street	940 58	
Salem street, from Potters avenue to Waldo street	1,397 58	
Sheldon street, from Benefit to Brook	7 13	
Steere avenue, from Manton to Amherst street	1,117 55	
Veazie street, from Douglas avenue to Branch	2,002 48	
Whipple street, from Admiral to Douglas avenue	6,432 96	
Wood street, from Messer to Ellery	1,028 58	
		103,183 11

PAVE WITH GRANITE BLOCKS.

Atwells avenue, from Knight street to Harris avenue	$ 3,572 25	
Benefit street, from Wickenden to India	8,716 73	
Broad street, from Chestnut to Pearl	14,549 34	
Broad street, from Dorrance to Chestnut	3,818 69	
Canal street, from Bowen to Smith	3,713 17	
Charles street, from Randall square to near Ashburton street	4,478 47	
Fountain street, from Aborn to Dean	8,151 43	
High street, from Barton to Olneyville square	21,843 59	
Manton avenue, from Chaffee street to Florence	5,052 49	
Mathewson street, from Westminster to Washington	2,339 23	
Page street, from Weybosset to Pine	2,304 58	
Pike street, from Brook to South Main	7,292 70	
Point street, from Chestnut to near Beacon avenue	14,696 37	
Randall street, from Randall square to North Main street	5,527 77	
Richmond street, from Broad to Ship	5,661 47	
South Main street, from Planet to James	2,600 00	
South Main street, from Transit to India	12,008 24	
Steeple street, from Canal to North Main	2,003 53	
Tockwotton street, from East to South Main	13,784 05	
Westminster and Weybosset streets	13,107 74	
Wickenden street, from Transit to Brook	11,784 30	
		167,006 14
Amount carried forward		$440,595 95

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Amount brought forward.....		$440,595 95
PAVE WITH BRICKS.		
Eagle street, from Harris avenue to Kinsley....	$4,182 17	
Harkness court, from Pine street to Weybosset.	1,953 39	
Mathewson street, from Washington to Cove....	4,423 02	
Weybosset street, from Custom House to Post-office court.....	1,465 42	
		12,024 00
PAVE WITH GRANITE BLOCKS AND MACADAMIZE.		
Charles, Admiral and Oriental streets.....		9,731 65
PAVE WITH GRANITE BLOCKS AND BRICKS.		
Aborn street, from Westminster to Sabin		8,676 07
PAVE WITH GRANITE BLOCKS AND COBBLE.		
North Main and Benefit streets, at Constitution hill.....		1,873 79
TO BE BUILT.		
Kinsley avenue, from Gaspee street to Hemlock		12,260 65
TO BUILD AND CURB.		
Elmwood avenue, from Lexington to railroad bridge		31,509 36
TO REBUILD.		
Transit street, from Benefit to Governor		3,695 11
BUILD ROADWAY.		
Broad street, from railroad bridge to city line ..	$1,215 94	
Prairie avenue, from Public street to Logan avenue.....	2,233 17	
		3,449 11
BUILD ROADWAY AND CONCRETE GUTTERS.		
Maple street, from Prince to Beacon avenue.....		19 80
TO BE BROUGHT TO GRADE.		
Butler avenue, from its southerly terminus to North street.....	$39,648 88	
Charles, Admiral and Oriental streets.....	460 82	
Richardson street, from Prairie avenue to Plain street.....	4,213 52	
Wood street, from Messer to Ellery.....	689 30	
		45,012 52
Amount carried forward.....		$568,848 01

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Amount brought forward.....		$568,848 01
MACADAMIZE.		
Smith street, from Ruggles to River avenue.....	$2,572 59	
Smith street, from River avenue to the city line.	3,034 23	
		5,606 82
MACADAMIZE OR ASPHALT ROADWAY.		
North Burial Ground, from entrance to North Main street.....		1,256 26
MACADAMIZE ROADWAY, RESET CURBING AND CONCRETE GUTTERS.		
Lester street, from Pearl to Bridgham.....		44 93
GRADE AND PUT IN GOOD CONDITION.		
Academy avenue, from Chalkstone to Smith street.....	$3,381 61	
Gordon avenue, from Colfax street to Public...	858 55	
Hall street, from Ledge about 150 feet southerly.	78 00	
		4,318 16
TAKE POSSESSION, REMOVE OBSTRUCTIONS AND GRADE.		
Bucklin street, from Daboll to Cromwell.....		4,818 69
REMOVE OBSTRUCTIONS AND RESET CURBING.		
Knight street, from High to Broadway.....		758 15
RESET CURBING AND REPAVE GUTTERS.		
Valley street, west side, from driveway near Grove street to opening in curb about 250 feet south of Delaine.....,....		1,308 14
RESET CURBING, BUILD DRIVEWAY AND CONCRETE SIDEWALK.		
Amherst street, adjoining lot occupied by fire station No. 14.....		154 73
TAKE POSSESSION.		
Kossuth street, from Hyat to Pope		35 00
Amount carried forward.....		$587,148 89

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Amount brought forward		$587,148 89
TAKE POSSESSION AND REMOVE OBSTRUCTIONS.		
North street, from North Main to Swan Point road		1,565 09
PUT IN GOOD CONDITION.		
Elmwood avenue, from old city line to new city line	$ 308 76	
Opper street, from Nahant to Branch avenue	1,586 06	
		1,894 82
CONCRETE SIDEWALKS.		
East, Tockwotton and Wickenden streets, surrounding Tockwotton Park		656 11
REMOVE URINAL.		
Burgess square		34 13
		$591,299 04

SIDEWALKS AND CURBING.

The expenditures on account of sidewalks and curbing from July 1 to September 30, 1893, inclusive, were $6,444 61

Classified as follows:

Granite curbing	$6,132 99
Niagara street, Wendell street and Messer court adjoining school estates	292 49
Concreting sidewalks	19 13
	$6,444 61

Curbing bills deposited with the city treasurer for collection, from July 1 to September 30, 1893, inclusive, amounted to . $372 70

During the quarter coupons from bills collected have been returned by the city treasurer, and receipted for amounting to . $10,152 70

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The expenditures on account of sidewalks and curbing for the fiscal year ending September 30, 1893, inclusive, amounted to $41,353 01

Classified as follows:

Granite curbing	$39,578 55
Contract reservations	1,411 00
Niagara street, Wendell street and Messer court adjoining school estates	292 49
Concreting sidewalks	70 97
	$41,353 01

CITY ENGINEER.

Bills approved on account of the city engineer's department from July 1 to September 30, 1893, inclusive, amounted to . $15,608 76

Charged as follows:

Salary—city engineer	$ 1,500 00
Salaries of assistants	12,196 92
Salaries of clerks	822 50
Horse-car tickets, etc.	516 00
Instruments and repairs	290 41
Supplies—drawing materials, etc	235 03
Sundries	38 15
Meteorological instruments and repairs	6 75
Horse hire, barn expenses, etc	3 00
	$15,608 76

Bills deposited with the city treasurer for collection from July 1 to September 30, 1893, inclusive, amounted to . . . $1 08

As follows:

Blue prints	$ 65
One bottle of ink	23
Blue process paper	20
	$1 08

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During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $1 5

As follows:

Blue prints	$1 15	
One bottle of ink	23	
Blue process paper	20	
	$1 58	

Bills approved on account of city engineer's department for the fiscal year ending September 30, 1893, inclusive, amounted to $53,722 8

Charged as follows:

Salary—city engineer	$ 6,000 00
Salaries of assistants	41,421 52
Salaries of clerks	3,021 46
Horse-car tickets, etc.	1,317 80
Supplies—drawing materials, etc.	1,013 24
Instruments and repairs	820 81
Sundries	100 33
Horse hire, barn expenses, etc.	17 62
Meteorological instruments and repairs	10 10
	$53,722 88

BRIDGES.

August 29th, the offer of Smith Concrete Co. to asph roadway and sidewalk of Washington bridge over the Pro dence river was accepted.

September 13th, the proposal of Dexter Gorton to bu a wooden bridge at Adelaide avenue, over the tracks of New York, New Haven and Hartford Railroad Co., accepted, and a contract was subsequently execu Amount, $1,817.00.

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During the quarter the following work was completed, namely:

No. of resolution.	Date of approval.	
832.	Dec. 20, 1892,	*Acorn street bridge over Woonasquatucket river.*
329.	June 6, 1893,	*Academy avenue bridge over stream between Smith street and Chalkstone avenue.*

The following work was in progress at the end of the quarter, viz.:

No. of resolution.	Date of approval.	
466.	Aug. 2, 1892,	*Washington bridge over Providence river:*—to build bridge and abutment walls.
641.	Oct. 8, "	*City Dock:*—to purchase materials and build.
830.	Dec. 20, "	*Francis street bridge over Woonasquatucket river.*

The following work had not commenced September 30, 1893, viz.:

No. of resolution.	Date of approval.	
831.	Dec. 20, 1892,	*Oak street foot-bridge over railroad tracks.*
448.	July 22, 1893,	*Adelaide avenue, over tracks of the N. Y., N. H. and H. R. R. Co.*

Bills approved on account of bridges from July 1 to September 30, 1893, inclusive, amounted to $17,913 77

Charged as follows:

Acorn street bridge—to build.....	$2,965 29
Barn expenses..	54 76
Amount carried forward.....	$3,020 05

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Amount brought forward	$3,020 05
Building at city yard	46
Central or Red bridge	55 73
Crawford street bridge	12 00
Hemlock street bridge	8 13
Horses, wagons, harnesses, etc.	6 75
Lumber, hardware, etc.	530 60
Park street bridge	1 50
Point street bridge	249 50
Randall street bridge	2 24
Rent of keeper's house, Washington bridge	50 00
Salaries—Central or Red bridge	516 25
Salaries—Point street bridge	1,085 50
Salaries—Washington bridge	540 75
Sundries	57 21
Tools	52 27
Wanskuck bridge	27 03
Washington bridge, near India Point	336 96
Washington bridge, over Providence river—to rebuild	11,360 84
	$17,913 77

Bills approved from July 1 to September 30, 1893, inclusive, for constructing piers for the Francis street bridge, have been paid from the appropriation for filling the cove basin to the amount of . . . $6,695 94

Bills for expenditures for construction of wharf at the new city dock from July 1 to September 30, 1893, inclusive, have been approved and paid from the appropriation for contingencies, to the amount of . . $4,131 50

Bills deposited with the city treasurer for collection, (for old lumber sold) from July 1 to Sept. 30, 1893, inclusive, amounted to $19 90

During the quarter coupons from bills collected (for old lumber sold) have been returned by the city treasurer and receipted for, amounting to $19 90

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Bills approved on account of bridges for the fiscal year ending September 30, 1893, inclusive, amounted to $81,960 90

Charged as follows:

Acorn street bridge—to build	$5,720 28
Atwells avenue bridge	1 85
Barn expenses	294 69
Branch avenue bridge	5 84
Branch avenue culvert	2 02
Building at city yard	15 96
Cemetery street bridge	44 75
Central or Red bridge	550 29
Charles street bridge	4 67
Crawford street bridge	39 50
Delaine street bridge	2 41
Eagle street bridge	4 68
Exchange bridge	57 56
Gaspee street bridge	116 05
Geneva bridge	3 70
Hawkins street bridge	2 94
Hemlock street bridge	17 60
Horses, wagons, harnesses, etc	397 43
Lumber, hardware, etc	2,235 87
Nash lane bridge	1 85
Park street bridge	80 83
Point street bridge	1,754 43
Railroad Crossing street bridge	2 00
Randall street bridge	59 49
Rent of keeper's house, Washington bridge	120 00
Salaries—Central or Red bridge	1,872 50
Salaries—Point street bridge	3,995 75
Salaries—Washington bridge	1,975 10
Smith street bridge	65 38
Smithfield avenue bridge	6 13
Stevens street bridge	3 74
Sundries	321 55
Tar bridge—Manton avenue	7 28
Tools	455 12
Valley street bridge—north span	41 57
Valley street bridge—south span	24 11
Veazie street bridge	14 43
Wanskuck bridge	35 05
Amount carried forward	$20,354 40

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Amount brought forward	$20,354 40	
Washington bridge, near India Point	3,749 03	
Washington bridge, over Providence river—to repair	41 05	
Washington bridge, over Providence river—to rebuild	57,514 91	
West River street bridge	93	
Weybosset bridge	299 64	
Whelden street bridge	94	
	$81,960 90	

Bills approved for construction of piers for the Francis street bridge during the fiscal year ending September 30, 1893, inclusive, have been paid from the appropriation for filling the cove basin, to the amount of $7,685 78

Bills for expenditures for construction of the wharf at the new city dock during the fiscal year ending September 30, 1893, inclusive, have been approved and paid from the appropriation for contingencies, to the amount of . . $44,630 25

ROBERT E. SMITH,

Commissioner.

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FORTY-FOURTH QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING DECEMBER 31, 1890.

72548

The Providence Press:
Snow & Farnham, City Printers,
19 Custom House Street.
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REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., Jan. 1, 1894.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the forty-fourth quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and cost of same for the quarter ending December 31, 1893.

WATER WORKS.

October 10th, the offer of Coffin Valve Company, of Neponset, Mass., to furnish and deliver in this city fifty fire hydrants, boxes and covers, was accepted. Amount, $5,100.00.

October 25th, the offer of Chapman Valve Manufacturing Company to furnish and deliver six post hydrants, was accepted. Amount, $364.14.

December 19th, the proposal of Warren Foundry and Machine Company to furnish and deliver about 1,090 tons of cast-iron water pipes, of various sizes, was accepted and a contract subsequently executed. Amount, $23,925.50.

December 21st, the offer of John W. Lyon to furnish and deliver taps and stops, of various sizes, for the year 1894, was accepted. Amount, $1,210.75.

December 21st, the offer of Thomas Phillips & Co. to furnish and deliver four thousand pounds of AAA lead

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pipe, of various sizes, and fifteen thousand pounds pig lead, Anchor brand, was accepted. Amount, $730.00.

December 21st, the offer of L. H. Tillinghast & Co. to furnish and deliver four thousand pounds AAA lead pipe and fifteen thousand pounds pig lead, Anchor brand, was accepted. Amount, $730.00.

December 22d, the proposal of Fuller Iron Works to furnish special castings, service boxes, and castings for sewers required during 1894, was accepted and a contract subsequently executed.

December 29th, the proposal of Pomroy Coal Co. to furnish teams required for teaming at the city pipe yard during the year 1894, was accepted.

The average daily consumption of water during the last quarter was 8,422,814 gallons, and the average daily consumption for the year 1893 was 9,128,563 gallons.

Work had not commenced laying water pipes as follows, December 31, 1893:

No. of resolution. Date of approval.
724. Dec. 8, 1893, *In Roger Williams Park.*

Water pipes were laid during the quarter as follows:

12-INCH.	
In Park avenue, and Park avenue Town of Cranston.....	799.87 feet.
8-INCH.	
In Charles, Hall and Hawkins streets and Northup avenue; in Pawtuxet avenue, Town of Cranston; and in Fruit Hill avenue, Town of North Providence.....	2,918.28 feet.
6-INCH.	
In Althea, Babcock, Bingham, Borva, Burrows, Carder, Carlisle, Caxton, Dean, Early, Glover, Hall, Hamlin, Horton, Langdon, Lawn, Malvern, McAvoy, Printery, Promenade, River, Shove, Sorrento, Steeple, Stone, Vaughan, White and Wyatt streets; Adelphi, Andrews, Doyle, Duncan, Madison, Morris, Norwood, Ohio, Pavilion, and Stamford avenues; Thurber's lane and Roger Williams Park; in Cleveland and King streets	
Amount carried forward.....	3,718.15 feet.

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Amount brought forward	3,718.15 feet.
and Union avenue, Town of Johnston; in Prospect street, Francis, Narragansett, Princess and Wentworth avenues, and Rhodes place, Town of Cranston; and in Metcalf avenue, Town of North Providence	14,923.08 feet.
Total	18,641.23 feet.

or 3.530+ miles.

Water pipes were removed during the quarter as follows:

6-INCH.

In Borva street	57.49 feet.

or .011— miles.

Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.00 feet.
30-inch	59.893.04 feet.
24-inch	43,553.03 feet.
20-inch	9,626.59 feet.
16-inch	33,243.82 feet.
12-inch	77,754.09 feet.
10-inch	14,652.26 feet.
8-inch	225,358.01 feet.
6-inch	966,634.30 feet.
Total	1,440,799.14 feet.

or 272.879— miles.

Twenty-two fire hydrants have been set during the quarter, one in each of the following locations:

Adelphi avenue, north side, about 185 feet east of Elmgrove avenue.
Canal street, southeast corner of Lonsdale street.
Canal street, east side, about 40 feet south of Throop alley.
Charles street, east side, about 910 feet north of Silver Spring street.
Concord street, Johnston, north side, about 240 feet south of Rocky Hill road.
Hamlin street, north side, about 160 feet east of Elmwood avenue.
Helme street, northwest corner of River street.
Horton street, east side, about 250 feet north of Northup avenue.
Langdon street, east side, opposite north line of Montgomery street.
Lawn street, east side, at southeast corner of Glover street.
Malvern street, east side, about 210 feet north of Northup avenue.
Narragansett avenue, Cranston, east side, at the southerly corner of Dow street.

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Norwood avenue, Cranston, north side, about 341 feet west of Broad street.
Princess avenue, Cranston, east side, about 270 feet south of Cranston street.
Randall square, east side, about 60 feet south of south line of Randall street.
Rochambeau avenue, north side, about 160 feet west of range of west line of Camp street.
South Water street, southeast corner of James street.
South Water street, southeast corner of Transit street.
South Water street, near southeast corner of Bridge street.
South Water street, northeast corner of Patriot street.
South Water street, southeast corner of Power street.
Vaughan street, east side, about 440 feet north of Northup avenue.

The total number of fire hydrants is now fifteen hundred and seventy-six—fifteen hundred and twenty-four flush and fifty-two post hydrants.

During the quarter three hundred and five water meters were set, of which number seven were to replace other meters. The use of two meters was discontinued.

The following meters were in use at the close of the quarter.

Kind.	Size.								Total.
	⅝-in.	¾-in.	1-in.	1½-in.	2 in.	3-in.	4-in.	6-in.	
Ball & Fitts, piston	3,068	606	145	35	5	.....	.....	.....	3,859
Ball & Fitts, rotary	.....	.....	22	20	2	5	2	.....	51
Crown	5,595	655	174	77	25	10	10	.....	6,546
Fales, Jenks & Sons	.....	.....	1	.....	.....	.....	.....	.....	1
Neptune	28	.....	.....	.....	.....	.....	.....	.....	28
Thomson	1,291	203	47	35	12	3	2	3	1,596
Worthington	4	1	.....	.....	1	.....	1	.....	7
	9,986	1,465	389	167	45	18	15	3	12,088

Eight plumber's licenses were issued during the quarter, making the total number one hundred and six, all of which expired Dec. 31, 1893.

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Twelve hundred and fifty-two permits to do plumbing work were issued during the quarter.

Two hundred and ten applications for water were made during the quarter, making the total number Dec. 31, 1893, nineteen thousand three hundred and fifty-two.

The number of new service stops opened during the quarter was two hundred and thirty-eight.

The total number of service stops opened to Dec. 31, 1893, inclusive, was eighteen thousand six hundred and thirty-six. The number in actual use Dec. 31, 1893, was seventeen thousand four hundred and seventeen.

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The following table shows the lengths, sizes, etc., of services laid during seventeen years ending December 31, 1893:

YEARS.	Lengths of Services Laid in Feet. — Sizes of Pipes.							Trenching.	Paving.	Taps Used.						Stops Used.						Service Boxes Used.
	½ inch.	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	1½ inch.	Totals.			⅜ in.	½ in.	⅝ in	¾ in.	1 in.	Total.	⅜ in.	½ in.	⅝ in.	¾ in.	1 in.	Total.	
1877....	2,776.8	8,679.3	1,884.4	248 8	114.2	7.	13,710.5	14,422.44	2,105.67	173	571	114	15	6	879	173	571	114	15	6	879	896
1878 .	2,209.8	6,881.8	1,436.6	119.4	120.7	35.3	10,803.6	11,365.38	1,659.34	133	427	91	7	13	671	148	464	91	7	12	722	725
1879....	1,624.9	6,107.5	874.4	275.7	66.2	7.	8,955.7	9,421.4	1,375.52	101	335	57	17	9	519	109	380	60	17	9	575	572
1880....	2,163.6	5,951.2	1,150.	483.6	186.1	16.9	9,951.4	10,468.87	1,528.45	136	334	66	25	17	578	141	358	67	26	17	609	603
1881....	1,078.9	6,269.4	741.1	253.1	233.4	8.4	8,584.3	9,067.2	1,330.6	68	392	55	21	18	554	71	411	47	17	18	564	559
1882....	.....	8,073.8	581.3	226.4	92.	32.	9,005.5	9,481.5	1,020.	....	511	49	17	15	592	....	525	41	15	14	595	610
1883....	9.	8,075.83	761.99	143.	131.9	60.	9,180.82	9,649.5	1,284.5	1	508	61	12	14	596	2	537	44	10	13	606	629
1884....	.....	8,048.72	732.2	266.3	119.6	23.2	9,190.02	9,715.5	1,054.6	....	512	64	18	17	611	....	539	51	15	13	618	641
1885 ...	33.9	7,971.78	667.1	106.4	34.	28.4	8,841.58	9,283.	1,109.5	...	490	48	11	7	556	1	519	32	5	6	563	586
1886 ...	23.	7,764.6	699.5	115.4	98.6	25.4	8,726.5	9,213.5	965.5	....	481	64	13	12	570	...	518	49	7	11	585	609
1887....	.....	8,381.8	456.6	81.4	75.8	20.2	9,015.8	9,422.	1,164.1	....	516	47	11	11	585	....	543	32	7	10	592	612
1888....	.....	7,496.6	553.6	66.8	105.2	55.8	8,278.	8,768.	1,072.5	. ..	495	52	9	10	566	....	519	39	5	10	573	587
1889....	.....	9,211.9	514.2	199.	90.2	8.2	10,023.5	10,563.	1,125.5	....	546	53	18	10	627	....	579	37	12	6	634	664
1890....	.....	8,997.8	671.3	194.7	241.6	61.2	10,166.6	10,792.5	1,183.	....	549	58	17	16	640	....	586	42	11	15	654	680
1891....	.....	12,531.28	965.5	237.2	311.9	53.5	14,099.38	14,816.	1,445.	....	729	88	30	24	871	....	797	66	15	22	903	944
1892....	.....	14,672.27	1,284.6	152.9	248.8	.....	16,358.57	17,177.	1,945.5	....	853	103	22	17	995	...	943	75	9	17	1,044	1,093
1893....	.....	11,153.2	936.5	245.7	248.6	.....	12,584.	13,214.5	1,500.	....	672	81	24	17	794	....	727	65	14	16	822	851
Totals..	9,919.9	146,986.78	14,909.99	3,415.3	2,518.3	442 5	177,475.77	186,941.49	22,958.23	612	8,721	1,151	287	253	11,201	645	9,516	948	210	215	11,538	11,881

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The following table shows the lengths, sizes, etc., of services laid during the year ending December 31, 1893:

Months.	Lengths of Services Laid in Feet.								Taps Used.					Stops Used.					Service Boxes Used.
	Sizes of Pipe.					Totals.	Trenching.	Paving.											
	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	1½ inch.				½ in.	⅝ in.	¾ in.	1 in.	Total.	⅝ in.	¾ in.	¾ in.	1 in.	Total.	
January	29.7	.....	.....	.....	.....	29.7	29.5	.....	1	....	....	....	1	1	....	....	....	1	1
February	20.6	.....	.....	.....	.....	20.6	23.	8.	3	....	....	....	3	3	....	....	...	3	3
March	192.8	45.6	.....	28.4	.....	266.8	278.	54.	14	3	....	1	18	14	3	....	2	19	19
April	1,570.	214.8	50.4	8.2	.....	1,843.4	1,983.	239.5	90	15	2	1	108	96	14	2	1	113	114
May	1,221.	95.6	15.4	36.4	.....	1,368.4	1,439.	189.5	70	9	2	4	85	79	8	2	2	91	94
June	1,645.6	101.4	46.1	.....	.....	1,793.1	1,897.5	258.5	110	10	5	1	126	122	7	3	....	132	138
July	1,578.5	102.5	52.4	69.3	.....	1,802.7	1,882.5	199.	83	7	5	4	99	91	5	2	4	102	107
August	1,076.8	93.4	.....	.....	.....	1,170.2	1,231.	120.	67	8	1	....	76	71	7	....	....	78	80
September	888.8	95.6	73.2	39.9	.....	1,097.5	1,159.	142.5	59	8	4	3	74	59	8	4	3	74	74
October	923.6	132.8	.....	8.2	.....	1,064.6	1,124.	132.	57	14	2	1	74	65	9	....	1	75	82
November	1,224.8	24.6	8.2	33.	.....	1,290.6	1,352.	170.	70	4	1	2	77	74	3	1	2	80	81
December	781.	30.2	.....	25.2	.....	836.4	866.	77.	48	3	2	....	53	52	1	....	1	54	58
Totals	11,153.2	936.5	245.7	248.6	.....	12,584.	13,214.5	1,590.	672	81	24	17	794	727	65	14	16	822	851

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Changes in size and location of services in 1893.

Taps and Stops.										Sizes and Lengths of Lead Pipe.									Trenching.	Paving.	Change in size only.	Change in location only.	Change in both size and location.
Taken Out.					Inserted.					Taken Out.					Inserted.								
3/8 inch.	1/2 inch.	5/8 inch.	3/4 inch.	1 inch.	3/8 inch.	5/8 inch.	5/8 inch.	3/4 inch.	1 inch.	1/2 inch.	5/8 inch.	3/4 inch.	1 inch.	1 1/4 inch.	5/8 inch.	3/4 inch.	1 inch.	1 1/4 inch.					
24	27	4	2	4	.....	23	15	10	7	366.4	376.2	72.	29.2	33.7	264.6	275.	148.	86.	1408.7	457.1	30	19	6

Nine services have been removed.

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The following table exhibits the number of service stops opened each month from the commencement to December 31, 1893:

Months.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.
January.....	.....	54	33	21	34	55	15	49	9	20	7	17	15	21	17	18	26	7	39	36	39	56	40
February....	.....	47	18	18	7	25	23	18	9	19	3	11	9	10	7	15	7	10	21	25	26	23	24
March.....	.....	38	34	63	7	45	32	60	19	46	23	39	11	28	9	24	16	14	19	28	24	28	36
April.....	.....	109	109	108	32	108	82	78	52	58	55	49	55	62	48	68	60	38	61	53	73	76	71
May.....	.....	224	206	147	162	168	136	95	80	84	66	72	78	62	62	61	70	52	74	66	114	83	91
June.....	.....	329	205	151	172	148	114	103	71	109	82	48	64	81	81	59	50	86	59	80	83	103	106
July.....	.....	333	261	127	141	158	83	80	49	75	56	77	66	76	77	83	62	89	74	67	85	105	93
August.....	.....	224	209	123	83	94	91	51	51	39	58	87	69	61	57	71	49	52	56	76	95	104	115
September...	.....	184	147	139	101	94	80	63	44	37	60	67	93	50	70	59	74	63	64	77	93	114	88
October.....	.....	138	135	160	92	84	81	78	79	48	61	56	47	65	62	52	50	70	64	54	104	102	96
November....	.....	100	104	185	86	54	73	57	63	54	37	64	49	51	39	57	69	47	58	72	81	118	80
December....	56	83	45	122	60	35	55	45	47	29	40	27	56	44	46	28	49	42	53	50	83	102	62
Totals.....	56	1,863	1,596	1,364	977	1,068	865	777	573	618	548	614	612	611	575	595	612	570	642	684	900	1,014	902

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The receipts for water each year since the commencement have been as follows:

Year.	Amount.	Year.	Amount.
1872	$41,003 51	1883	$253,632 [illegible]
1873	97,386 09	1884	302,308 [illegible]
1874	132,052 39	1885	313,561 21
1875	165,144 71	1886	323,084 67
1876	183,868 73	1887	330,513 [illegible]
1877	200,039 39	1888	346,731 [illegible]
1878	218,883 33	1889	377,497 [illegible]
1879	229,551 78	1890	401,140 [illegible]
1880	247,705 06	1891	404,553 [illegible]
1881	260,530 87	1892	409,421 21
1882	269,318 77	1893	427,546 51

The amount of bills approved on account of water works from October 1 to December 31, 1893, inclusive, was:

For construction and extension, . . $33,865 95

Classified as follows:

Cast iron water pipe	$15,737 62
Fire hydrants, boxes and covers	5,477 82
Laying water pipe	5,132 68
Laying service pipe	1,409 58
Experimental tests of water filtration	1,020 11
Special castings	947 31
Rent of wharf and pipe yard	750 00
Fruit Hill reservoir, for construction	669 53
Fruit Hill reservoir, for repairs	624 93
Labor on and carting pipe	417 37
Stop valves	401 02
Sundries	343 27
Horses, wagons, harnesses, etc	276 45
Service pipe	199 02
Wharf salaries	195 00
Barn expenses	184 70
Tools	79 54
	$33,865 95

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For maintenance, ... $29,040 16

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$3,534 56	
Firemen	844 30	
Sundries	719 08	
Engineers	513 50	
Superintendence	299 00	
Corliss pumping engine and house	265 55	
Oil, waste and packing	117 24	
Labor on fuel	79 65	
Real estate	76 60	
Lights	48 76	
Barn expenses	39 21	
Cornish engine house	17 88	
Worthington pumping engine	12 98	
Care of grounds	12 15	
Cornish pumping engine	9 90	
		$6,590 36

SOCKANOSSET RESERVOIR.

Watchman	$182 00	
Sundries	42 70	
		224 70

HOPE PUMPING STATION.

Engineers	$575 25	
Firemen	455 30	
Lights	135 47	
Care of grounds	72 63	
Sundries	71 49	
Oil, waste and packing	39 21	
Coal and wood	14 38	
Hope pumping engine, No. 1	11 55	
Hope pumping engine, No. 2	66	
		1,375 94

HOPE RESERVOIR.

Watchman		204 75

FRUIT HILL RESERVOIR.

Sundries	$1,087 70	
Watchman	201 25	
		1,288 95
Amount carried forward		$9,684 70

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Amount brought forward		[illegible]

PIPE LINE AND SERVICE STOPS.

Repairs	$3,010 62	
Superintendence — salaries	852 75	
		[illegible]

METER DEPARTMENT.

Water meters	$4,510 40	
Setting and repairing meters	1,921 09	
		6,431 [illegible]

MISCELLANEOUS.

Town of Cranston tax	$4,700 13	
Clerks' and inspectors' salaries	2,967 32	
Prevention of defilement of the Pawtuxet	451 21	
Town of North Providence tax	400 00	
Barn expenses	214 58	
Analyses of water	97 05	
Horses, wagons, harnesses, etc	77 02	
Pipe yard, office expenses	36 27	
Real estate at Pawtuxet	35 00	
Sundries	32 06	
Public drinking fountains and troughs	30 14	
Town of Lincoln tax	18 90	
Thawing services, etc	92	
		9,060 6[illegible]
		$29,040 [illegible]

The amount of expenditures from October 1 to December 31, 1893, inclusive, was . . $62,906 [illegible]

The total expenditures to December 31, 1893, inclusive, were . . . . . $7,800,186 [illegible]

The *net* expenditure for construction and extension from October 1 to December 31, 1893, inclusive, was	$31,834
The *net* expenditure for construction and extension to December 31, 1893, inclusive, was	$5,943,49[illegible]
The *net* expenditure for maintenance from October 1 to December 31, 1893, inclusive, was	$20,29[illegible]
The *net* expenditure for maintenance to December 31, 1893, inclusive, was	$1,159,97[illegible]

Bills deposited with the city treasurer for collection, from October 1 to December 31, 1893, inclusive, amounted to $53,218

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As follows:

Water	$42,894 69
Water meters	6,309 25
Setting and repairing meters	2,395 05
Examination and repairs of pipe line	78 15
Permanently closing service stops	55 00
Rent of real estate	47 34
Penalties	18 00
Labor and material, laying service pipes, etc	1,272 83
Cast iron water pipe	145 20
Manure from pipe yard barn	3 00
	$53,218 51

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . $57,355 12

As follows:

Water	$46,648 82
Water meters	6,223 25
Setting and repairing meters	2,216 65
Rent of real estate	174 93
Examination and repairs of pipe line	71 36
Permanently closing service stops	55 00
Penalties	18 00
Labor and material, laying service pipes, etc	1,867 59
Cast iron water pipe	76 52
Manure from pipe yard barn	3 00
	$57,355 12

SEWERS.

During the quarter ending December 31, 1893, five hundred and fifty-eight permits were issued to drain layers—four hundred and twenty-nine for new work and one hundred and twenty-nine for extension and repairs of drains.

Three drain layers' licenses were issued during the quarter, making the total number sixty-four, all of which expired December 31, 1893.

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December 16th, the proposal of Herbert R. Horton to furnish the cement required during the year 1894, delivered on the work, was accepted and a contract subsequently executed.

December 27th, the proposal of Manchester & Hudson to furnish and deliver vitrified sewer pipes, branches, etc., for the year 1894, was accepted and a contract subsequently executed. Amount, $17,280.19.

December 27th, the proposal of Charles M. Kelly to furnish and deliver one million sewer brick was accepted and a contract subsequently executed. Amount, $7,100.00.

December 27th, the proposal of Long Island Brick Company to furnish and deliver one million sewer brick was accepted and a contract subsequently executed. Amount, $7,000.00.

SEWERS BUILT, IN MILES, TO DECEMBER 31, 1893:

ITEMS.	KIND.	Built Previous to 1893.	Built During 1893.	Total to Dec. 31, 1893.
Under regular appropriation.....	Brick.....	26.209	3.002	29.211
Under regular appropriation.....	Pipe.....	67.312	17.961	85.273
Under improved sewerage appropriation.....	Brick and Pipe	11.426	3.804	15.230
Total miles of sewers.....		104.947	24.767	129.714
Catch-basins built.....		2,902	322	3,224

October 9th, contracts for the construction of the following sewers, which were subsequently executed, were awarded as follows, namely:

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: amounts given below are what are estimated will be paid the contractors for and do not include cost of inspection and materials, or rock excavation.]

To George R. Newman.

resolution.	Date of approval.			
Sept.	23,	1893,	*Inkerman street, from Candace to Pekin,* . . .	$436 41
"	"	"	*Lilac street, from Cranston to Salem,*	1,209 23
"	"	"	*Moore street, from Updike to Elmwood avenue,* . .	580 20
"	"	"	*Potter street, from near Weybosset to Pine,*	266 20
"	"	"	*Rhodes and Eddy streets,* . . .	2,441 66

To David C. Liddle.

Sept.	23,	1893,	*Grove, Helme and River streets,* . .	1,702 60

ctober 27th, contracts for the construction of sewers e awarded and subsequently executed, as follows:

To Frederick E. Shaw.

resolution.	Date of approval.			
Oct.	20,	1893,	*Bowen street, from Brook to Thayer,*	$272 00
"	"	"	*Federal street, from Sutton to Vinton,*	207 60

ovember 3d, a contract for building a storm sewer was ded and subsequently executed, as follows:

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To Timothy F. Lyons.

No. of resolution.	Date of approval.		
634.	Nov. 3, 1893,	*Through land of the Riverside Mills, from Aleppo street to the Woonasquatucket river,*	$767 20

November 17th, a contract for building a storm sewer was awarded and subsequently executed, as follows:

To J. Frank Read & Co.

No. of resolution.	Date of approval.		
331.	June 6, 1893,	*Danforth street, from Vale street about 500 feet southerly,* . .	$998 70

December 2d, contracts for the construction of sewers for the improved sewerage system were awarded and subsequently executed, as follows:

To Frederick E. Shaw.

No. of resolution.	Date of approval.		
564.	Sept. 23, 1893,	*Section 10, Allen's avenue Division,*	$57,148
564.	" " "	*Section 14, Woonasquatucket River Division,*	45,586

To George R. Newman.

564.	Sept. 23, 1893,	*Section 11, Allen's avenue Division,*	63,031 1

To Everson & Liddle.

564.	Sept. 23, 1893,	*Section 12, Allen's avenue Division,*	58,987 0

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No. of resolution.	Date of approval.		
564.	Sept. 23, 1893.	*Section 13, Woonasquatucket River Division,*	$38,352 55

During the quarter the construction of the following sewers was completed, namely:

No. of resolution.	Date of approval.		Date of completion
652.	Oct. 8, 1892,	*Gaspee and Cove streets,* . .	Nov. 25, 1893.
653.	" " "	*Dorrance street, from Cove to Dyer,* . .	Oct. 19, 1893.
180.	Apr. 8, 1893,	*Balch street, Pacific and Hamburg avenues,* .	Oct. 17, 1893.
244.	May 16, "	*Jillson and Eddy streets,* . .	Nov. 24, 1893.
315.	" 20, "	*East avenue, from Pleasant street to Olney,* . .	Nov. 16, 1893.
368.	June 16, "	*Hope street, from Thayer to Lloyd,*	Oct. 20, 1893.
411.	" 30, "	*Tockwotton street, or land owned by the city, from Gano street to the Seekonk River,*	Oct. 3, 1893.
454.	July 26, "	*Duncan avenue, from Knowles street to North Main,* . .	Oct. 13, 1893.
475.	Aug. 4, "	*Plain street and Thurber's avenue,*	Nov. 8, 1893.

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No. of resolution.	Date of approval.		Date of completion.
512.	Sept. 12, 1893,	*Fountain street, from Jackson to Aborn,* . .	Nov. 10, 1893.
544.	" 23, "	*Grove, Helme and River streets,*	Nov. 10, 1893.
545.	" " "	*Inkerman street, from Candace to Pekin,* . .	Oct. 21, 1893.
547	" " "	*Lilac street, from Cranston to Salem,*	Dec. 6, 1893.
548.	" " "	*Moore street, from Updike to Elmwood avenue,*	Nov. 18, 1893.
549.	" " "	*Potter street, from near Weybosset to Pine,* .	Oct. 27, 1893.
550.	" " "	*Rhodes and Eddy streets,* .	Nov. 21, 1893.
600.	Oct. 20, "	*Bowen street, from Brook to Thayer,* . .	Nov. 25, 1893.
601.	" " "	*Federal street, from Sutton to near Vinton,* .	Nov. 13, 1893.
634.	Nov. 3, "	*Through land of the Riverside Mills, from Aleppo street to the Woonasquatucket River,* . .	Dec. 19, 1893.

At the close of the quarter work upon the following sewers of the improved sewerage system was in progress, namely:

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No. of resolution.	Date of approval.	
138.	Mar. 21, 1893,	*Norfolk and Station streets, Huntington avenue, Chambers and Burrington streets.*

Work upon the following lateral sewers was in progress at the close of the quarter, namely:

No. of resolution.	Date of approval.	
311.	May 20, 1893,	*Camp, North and North Main streets.*
372.	June 16, "	*Wickenden, South Main and Crawford streets.*

Work upon the following sewers, completing the work ordered by the city council, had not commenced December 31, 1893, namely:

No. of resolution.	Date of approval.	
546.	Sept. 23, 1893,	*Jewett and Senter streets.*
564.	" " "	*Dyer and Eddy streets and Allen's avenue.*
599.	Oct. 20, "	*Alma street, from Candace to Pekin.*
602.	" " "	*Public street, from Prairie avenue to Ocean street.*
603.	" " "	*Wayne street, from Douglas avenue to Candace street.*
697.	Dec. 2, "	*Harris avenue, from Broadway to Grove street.*
698.	" " "	*Logan avenue, from Plain street to Ocean.*
699.	" " "	*Mitchell street, from Broad to Melrose.*
700.	" " "	*Westfield street, from Elmwood avenue to Harrison street.*

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SEWER MAINTENANCE DEPARTMENT.

The following table shows the work performed by the department cleaning sewers, basins and drains for the year 1893:

Months.	Old Work.								New Work.									Total deposit removed, cubic yards.
	Old Drains.			Sand Catchers.		Open Ditches.			Sewers.				Catch-Basins.			Trapped.		
	Number.	Length in feet.	Deposit removed, cu. yds.	Number.	Deposit removed, cu. yds.	Number.	Length in feet.	Deposit removed, cu. yds.	Number.	Length in feet.	Deposit removed, cu. yds.	Dead ends.	No. times examined.	Number cleaned.	Deposit removed, cu. yds.	From hydrants.	By rain or snow.	
January	....	.....	.....	....	.....	....	.....	.....	6	2,000	39.33	.....	1	187	205.	.....	187	244.33
February	....	.....	.....	1	7.70	....	.....	.....	....	.....	.....	.....	1	130	172.	.....	130	179.70
March	....	.....	.....	...	.....	....	.....	.....	3	1,000	2.35	.....	1	304	574.	.....	304	576.35
April	....	.....	.....	1	6.	....	.....	.....	6	1,700	59.15	.....	1	501	752.60	.....	501	817.75
May	1	50	.30	....	.....	....	.....	.....	....	.....	.....	.....	1	723	1,102.35	.....	723	1,102.65
June	2	60	19.30	....	.....	....	.....	.....	1	150	.55	.....	2	761	1,112.80	.....	761	1,132.35
July	....	.....	.....	2	8.90	1	175	44.43	3	300	11.70	.....	1	877	1,125.63	.....	877	1,190.66
August	1	55	1.15	6	33.30	1	100	11.10	29	14,700	14.35	190	2	939	1,048.18	.....	939	1,108.08
September	1	45	1.15	1	34.35	1	1,000	61.63	4	2,500	1.15	.....	1	1,060	1,130.70	.....	1,060	1,228.98
October	1	150	88.99	....	.....	1	50	3.	31	9,000	5.30	.....	2	1,009	1,134.	.....	1,009	1,231.20
November	....	.....	.....	....	.....	2	300	55.55	3	200	1.20	.....	1	1,060	1,149.25	.....	1,060	1,206.
December	....	.....	.....	9	19.	....	.....	.....	1	600	26.80	.....	1	563	443.10	.....	563	488.90
Totals	6	360	110.50	20	109.25	6	1,625	175.71	87	34,010	161.88	190	15	8,114	9,949.61	.....	8,114	10,806.96

The amount of bills approved on account of sewers from October 1 to December 31, 1893, inclusive, was:

FOR CONSTRUCTION:

Regular appropriation	$81,840 32	
Improved sewerage appropriation	80,542 93	
		$162,383 25

Charged as follows:

Materials	$28,760 14
Contract reservations	9,858 00
Salaries of assistant engineers	2,773 50
Sundries—improved sewerage system	2,429 66
Sundries	1,087 54
Clerks' salaries	965 31
Testing cement	360 87
Additional catch-basins	50 52
Tools	2 60
Sewer in Adelphi avenue, from Elmgrove to Wayland	31 63
Sewer in Balch street, Pacific and Hamburg avenues	3,315 07
Sewer in Bowen street, from Brook to Thayer	513 85
Sewer in Camp street, from near Grandview to Cypress	906 83
Sewer in Camp, North and North Main streets	11,401 67
Sewer in Cedar street, from Tefft to Acorn	7 03
Sewer in Duncan avenue, from Knowles street to North Main	1,264 56
Sewer in Eagle street, from Harris avenue to the river	78 40
Sewer in East avenue, from Pleasant street to Olney	6,250 44
Sewer in Eddy and Ashmont streets	89 11
Sewer in Federal street, from Sutton to Vinton	125 98
Sewer in Fountain street, from Jackson to Aborn	1,773 32
Sewer in Grove, Helme and River streets	1,903 04
Sewer in Hope street, from Thayer to Lloyd	1,937 63
Sewer in Inkerman street, from Candace to Pekin	474 44
Sewer in Jillson and Eddy streets	6,563 38
Sewer in Lilac street, from Cranston to Salem	1,333 61
Sewer in Moore street, from Updike to Elmwood avenue	597 14
Sewer in Pacific street, from Broad to Hamilton	103 79
Sewer in Plain street and Thurber's avenue	7,336 80
Sewer in Potter street, from near Weybosset to Pine	271 80
Amount carried forward	$92,567 66

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Amount brought forward	$92,567 66
Sewer in Rhodes and Eddy streets	5,944 63
Sewer in Superior and Wendell streets	58 60
Sewer in Wickenden, South Main and Crawford streets	4,276 66
Sewer in Williams, Fremont, East Transit and Preston streets	37 04
Sewer in Allen's avenue Division, Section 10	56 00
Sewer in Allen's avenue Division, Section 11	16 00
Sewer in Allen's avenue Division, Section 12	114 70
Sewer in Aleppo street, from Manton avenue to its westerly termination	4,557 94
Sewer in Canal street and Canal avenue	6 89
Sewer in Dorrance street, from Cove to Dyer	7,618 64
Sewer in Gaspee and Cove streets	20,466 18
Sewer in Norfolk and Station streets	24,287 59
Sewer in Promenade street, from Rathbone to Gaspee	2,175 24
Sewer in Tockwotton street, or land owned by the city, from Gano easterly to the Seekonk river	73 57
Sewer in Valley street, from Eagle to Rathbone	97 91
Sewer in Woonasquatucket river Division, Section 13	28 00
	$162,383 25

For maintenance, ... $8,484 23

Charged as follows:

Cleaning basins and sewers	$3,496 77
Repairing basins and sewers	1,705 87
Inspection of connections	1,298 66
Cleaning and repairing old drains	766 16
Salary—superintendent	390 00
Barn expenses	337 02
Horses, wagons, harnesses, etc	188 95
Tools	178 28
Sundries	60 07
Cleaning private connections	49 20
Filling cisterns, etc	11 25
Telephone lines	2 00
	$8,484 23

The *net* expenditure for construction of sewers to December 31, 1893, inclusive, was $4,443,366 01

The *net* expenditure for maintenance of sewers to December 31, 1893, inclusive, was $404,518 21

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Bills deposited with the city treasurer for collection, from October 1 to December 31, 1893, inclusive, amounted to $195 15

As follows:

Cleaning private connections	$79 00
Filling cisterns, etc	18 75
Pumping at Roger Williams Park	12 10
Repairing roadway over sewer in Balch street	10 50
Laying drains to curbstones	71 30
Sewer material	3 50
	$195 15

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $197 65

As follows:

Cleaning private connections	$83 00
Cleaning sewer	16 50
Filling cisterns, etc	14 75
Pumping at Roger Williams Park	12 10
Laying drains to curbstones	71 30
	$197 65

HIGHWAYS.

Eight permits to open streets were issued during the quarter.

November 13th, the offer of Crabtree and Havey to furnish and deliver thirty thousand linear feet straight granite curbing was accepted. Amount, $18,000.00.

November 22d, the proposal of John Garvey to furnish and deliver five thousand square yards granite paving blocks was accepted and a contract subsequently executed. Amount, $7,500.00.

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November 22d, the proposal of Smithfield Granite Co. to furnish and deliver five thousand square yards granite paving blocks was accepted and a contract subsequently executed. Amount, $7,500.00.

During the year repairs have been made as follows:

PAVED STREETS.

CLASS NO. 1.—GRANITE BLOCKS ON SAND BEDDING; JOINTS FILLED WITH SAND.

Atwell's avenue	$61 05	
Canal street	2,389 71	
Charles street	7 00	
Cranston street	170 25	
Cross street	9 25	
Dyer street	85 70	
Exchange street	10 00	
Friendship street	32 52	
Manton avenue	587 68	
Market square	33 85	
North Main street	122 46	
Prairie avenue	3 75	
Westminster street	151 85	
Weybosset street	2 30	
		$3,667 37

CLASS NO. 4.—GRANITE BLOCKS ON CONCRETE FOUNDATION SIX INCHES THICK; JOINTS FILLED WITH GRAVEL AND ASPHALTIC MIXTURE.

Market square	$18 45	
South Main street	4 95	
		23 40

CLASS NO. 5.—COBBLE STONE ON SAND FOUNDATION.

Amos street	$41 03	
Branch avenue	44 80	
Canal street	3 33	
Charles street	4 60	
Clifford street	36 68	
Dorrance street	42 21	
Dyer street	27 77	
Eddy street	447 47	
Exchange place	483 49	
Amounts carried forward	$1,131 38	$3,690 77

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Amount brought forward	$1,131 38	$3,690 77
Friendship street	13 26	
Fulton street	38 50	
King street	150 55	
Knight street	20 00	
Mill street	1 75	
North Main street	151 71	
Sabin street	33 65	
Smith street	1 75	
South Main street	1,146 36	
South Water street	251 37	
		$2,940 28
Total		$6,631 05

UNPAVED STREETS.

CLASS A.—LIGHT TRAFFIC; SAND AT SUB-GRADE; ONE LAYER BROKEN STONE, SIX INCHES THICK AFTER ROLLING.

A street	$4 98
Abbott street	119 68
Abbott Park place	30
Aborn street	1 81
America street	17 12
Amy street	118 02
Angell street	144 25
Arch street	7 90
Armstrong avenue	1 00
Arnold street	3 80
Atwell's avenue	14 85
Baker avenue	1 40
Barclay street	1 50
Barnes street	9 35
Bassett street	16 65
Bath street	4 23
Battey street	9 34
Beacon avenue	12 65
Blackstone street	5 00
Bogman street	253 89
Bowen street	12 51
Bradford street	1 00
Branch avenue	89 95
Bridgham street	1,221 74
Broad street	47 19
Brook street	30 35
Burrill street	3 98
Amount carried forward	$2,154 44

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Amount brought forward	$2,154 44
Butler avenue	572 66
Byron street	2 10
Carpenter street	8 32
Central street	3 33
Chalkstone avenue	8 75
Chapel street	3 53
Cherry street	327 59
Chestnut street	14 46
Church street	60
Claverick street	70
Clifford street	11 02
Common street	70
Comstock street	3 00
Conduit street	70
Congdon street	11 75
Cooke street	11 11
Cottage street	1 50
Courtland street	346 03
Crary street	40
Cromwell street	117 41
Cushing street	1 87
Cypress street	302 40
Daboll street	23 63
Davis street	52
Dean street	33 29
Dexter street	45
Diman place	80 75
Douglas avenue	3 95
Doyle avenue	305 04
Dudley street	1 90
East street	3 00
East George street	405 03
Elbow street	30
Elm street	7 47
Esten street	3 82
Federal street	22 70
Fenner street	47
Foster street	1 80
Fountain street	1 20
Francis street	70
Franklin street	17 64
Friendship street	8 50
Gano street	50
George street	45
Glenham street	18 96
Governor street	30 18
Greene street	6 96
Amount carried forward	$4,883 58

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mount brought forward	$4,883 58
et street	5 02
street	3 90
treet	1 10
reet	15
treet	15
et	898 97
street	30
street	97 88
eet	16 80
t avenue	30
t	686 65
street	24 40
eet	1 25
street	614 29
reet	5 12
reet	25
eet	2 89
treet	1 05
reet	8 79
et	106 50
l street	75
on street	22
street	113 51
reet	1,376 41
eet	5 58
street	60
street	317 13
vis street	30
street	40
et	47
eet	3 85
et	32 24
et	2 85
eet	12 06
reet	62 43
et	11 13
enue	22
et	1 30
eet	60
t	40 34
et	14 00
eet	8 51
street	1 90
et	50
t	3 33
et	6 45
street	200 78
mount carried forward	$9,577 20

Digitized by Google

Amount brought forward	$9,577 20	
Potter street	2 25	
Potter's avenue	23 28	
Power street	16 44	
Prairie avenue	90	
Promenade street	780 39	
Providence street	1 85	
Public street	366 95	
Richmond street	37 69	
Royal street	77 90	
Sabin street	7 20	
Smith street	233 52	
Snow street	4 20	
Somerset street	2 95	
South Court street	37 27	
Spring street	2 70	
Star street	5 60	
Stewart street	2 75	
Stimson avenue	40	
Summer street	22 37	
Superior street	80	
Sutton street	6 30	
Tanner street	47 20	
Thayer street	27 53	
Thomas street	1 00	
Tobey street	40	
Tockwotton street	30	
Transit street	11 69	
Union avenue	22	
Vernon street	166 85	
Walker street	5 15	
Walnut street	5 27	
Warren street	4 50	
Washington street	8 58	
Waterman street	59 27	
Wesleyan avenue	7 40	
West Clifford street	2 00	
West Exchange street	8 01	
Westfield street	1 30	
West River street	4 43	
Wickenden street	1 50	
Willard avenue	87	
Williams street	14 75	
Winter street	4 00	
Wheaton street	30	
		$11,393

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IMILAR TO CLASS A, EXCEPT SCREENED USED INSTEAD OF BROKEN STONE.

venue	$2 90
enue	442 12
	40
eet	70 22
eet	234 35
nue	800 60
et	1 85
eet	26 60
iue	1 23
t	36
et	42 14
et	182 35
eet	602 63
t	173 33
avenue	197 90
iue	505 91
venue	1 15
iue	88 54
et	1 20
eet	1 60
et	30
	128 08
	1 00
	2 00
	45
	32 03
ue	2 26
enue	9 90
eet	21 50
t	60
ue	2 26
	75
et	138 52
venue	20 45
	4 95
	272 28
iue	462 05
treet	27
	265 48
eet	4 60
t	3 29
street	60 18
	160 06
t	25 97
	643 76
unt carried forward	$5,640 37

Digitized by Google

Amount brought forward	$9,577 20	
Potter street	2 25	
Potter's avenue	23 28	
Power street	16 44	
Prairie avenue	90	
Promenade street	780 39	
Providence street	1 85	
Public street	366 95	
Richmond street	37 69	
Royal street	77 90	
Sabin street	7 20	
Smith street	233 52	
Snow street	4 20	
Somerset street	2 95	
South Court street	37 27	
Spring street	2 70	
Star street	5 60	
Stewart street	2 75	
Stimson avenue	40	
Summer street	22 37	
Superior street	80	
Sutton street	6 30	
Tanner street	47 20	
Thayer street	27 53	
Thomas street	1 00	
Tobey street	40	
Tockwotton street	30	
Transit street	11 69	
Union avenue	22	
Vernon street	166 85	
Walker street	5 15	
Walnut street	5 27	
Warren street	4 50	
Washington street	8 58	
Waterman street	59 27	
Wesleyan avenue	7 40	
West Clifford street	2 00	
West Exchange street	8 01	
Westfield street	1 30	
West River street	4 43	
Wickenden street	1 50	
Willard avenue	87	
Williams street	14 75	
Winter street	4 00	
Woodland street	30	
		$11,593 43

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CLASS B.—SIMILAR TO CLASS A, EXCEPT SCREENED GRAVEL USED INSTEAD OF BROKEN STONE.

Academy avenue	$2 90
Adelaide avenue	442 12
Almy street	40
Amherst street	70 22
Appleton street	234 35
Atwell's avenue	800 60
Barton street	1 85
Beaufort street	26 60
Branch avenue	1 23
Brown street	36
Bucklin street	42 14
Burnett street	182 35
Burnside street	602 63
Chaffee street	173 33
Chalkstone avenue	197 90
Chapin avenue	505 91
Claremont avenue	1 15
Crocker avenue	88 54
Delaine street	1 20
Diamond street	1 60
Douglas street	30
Dover street	128 08
Eagle street	1 00
Earl street	2 00
Eaton street	45
Eddy street	32 03
Fenner avenue	2 26
Franklin avenue	9 90
Fremont street	21 50
Gaspee street	60
Harris avenue	2 26
Hope street	75
Hudson street	138 52
Humboldt avenue	20 45
Joslin street	4 95
Julian street	272 28
Manton avenue	462 05
McKenna street	27
Oak street	265 48
Oakland street	4 60
Oxford street	3 29
Pemberton street	60 18
Penn street	160 06
Pitman street	25 97
Plain street	643 76
Amount carried forward	$5,640 37

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Amount brought forward	$5,640 37	
Potter's avenue	309 80	
Prairie avenue	4 25	
Putnam street	57 85	
Steuben street	146 58	
Susan street	53 72	
Taber avenue	36	
Thurber's avenue	205 06	
Tobey street	248 55	
Valley street	46 41	
Vernon street	4 80	
Webster street	1 00	
Wood street	191 55	
		$6,91

CLASS C.—HEAVY TRAFFIC; SAND AT SUB-GRADE; TWO LAYERS BROKEN STONE, EACH FIVE INCHES THICK AFTER ROLLING.

Angell street	$33 00	
Benefit street	1,581 56	
Broadway	59 14	
Elmwood avenue	115 72	
Fountain street	48 40	
Friendship street	6 00	
Gaspee street	262 62	
Pine street	22 62	
Washington street	85 75	
Waterman street	3 00	
West Exchange street	5 55	
		$2,22

CLASS D.—SIMILAR TO CLASS C, EXCEPT NINE INCHES REFUSE STONE FOR FOUNDATION INSTEAD OF LOWER LAYER OF BROKEN STONE.

Elmwood avenue	$ 50	
Kinsley avenue	2 70	
		$

CLASS J.—STREETS WITH UNSCREENED GRAVEL ROAD-BED.

Academy avenue	$14 82	
Acorn street	1,165 62	
Adie street	9 00	
Admiral street	294 78	
Amount carried forward	$1,484 22	

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Amounts brought forward	$1,484 22	$20,730 29
Aldrich street	35	
Allen's avenue	40	
Amy street	1 00	
Anthony avenue	6 45	
Appleton street	2 30	
Armstrong avenue	30	
Bartlett street	38 40	
Barton street	1 20	
Bough street	65 97	
Briggs street	189 19	
Brook street	399 35	
Burrill street	30	
Burrington street	210 40	
Cabot street	40	
Cady street	30	
Candace street	12 00	
Carrington avenue	43 63	
Central street	2 30	
Church street	15	
Comfort street	90	
Crary street	17	
Davis street	15	
Diamond street	20	
Dike street	14 55	
Douglas avenue	214 58	
East avenue	293 36	
Eaton street	121 25	
Elizabeth street	75	
Ernest street	135 55	
Federal street	1 67	
Foster street	30	
Fruit street	5 50	
Fuller street	6 10	
Gano street	1 50	
Gold street	1 35	
Hall street	46 25	
Hawkins street	20 10	
Haymarket street	2 85	
Hopkins street	30	
Hospital street	52 62	
Hudson street	506 35	
Humboldt avenue	138 58	
Lafayette street	1 00	
Lippitt street	40	
Lonsdale street	4 30	
Luna street	22 60	
Manton avenue	248 12	
McAvoy street	3 50	
Amounts carried forward	$4,303 46	$20,730 29

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Amounts brought forward	$4,303 46	$20,730 29
Middle street	75	
Norfolk street	17 55	
North Davis street	3 05	
Northup avenue	26 50	
Oak street	249 63	
Olney street	67 70	
Orchard avenue	10 25	
Orms street	2 50	
Pacific avenue	25 73	
Pontiac road	34 32	
Pontiac street	217 24	
Potter's avenue	973 59	
Printery street	7 20	
Reservoir avenue	173 39	
River avenue	27 00	
Sabin street	40 43	
Senter street	30	
Seventh street	142 18	
South Court street	2 25	
Tobey street	15	
Troy street	310 96	
Union avenue	29 25	
Union street	3 55	
Vale street	2 20	
Veazie street	1 00	
Wayland avenue	381 69	
Willow street	374 85	
Wood street	183 45	
Woodward road	87 20	
		7,699 32
BUILDING DRIVEWAYS, ETC., IN SUNDRY STREETS.		2,678 45
		$31,108 06

Statements have been prepared of the cost of curbstone set, ascertained by the commissioner and certified to the board of aldermen for approval, as follows:

Allston stret, from River avenue to Cornell street	$ 743 96
Daboll street, from Bucklin to Dexter	957 76
Orchard avenue, from Wayland to Butler	1,555 85
Regent avenue, from River to Cornell street	704 80
Robin street, from Regent avenue to Allston street	311 59
Wood street, from Messer to Ellery	791 50
	$5,065 46

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In addition to the general patching necessary to maintain the streets in good repair, the following work has been done during the year ending December 31, 1893, namely:

New streets built	51,090	lineal feet.
Curbing set	94,000	lineal feet.
Streets rebuilt	7,500	lineal feet.
Streets re-surfaced	93,200	lineal feet.
Streets graded	21,620	lineal feet.
Block pavement laid	63,944	square yards.
Cobble pavement laid	4,800	square yards.
Brick pavement laid	4,563	square yards.
Concrete gutters and roadways built	12,886	square yards.
Asphalt gutters and roadways built	3,527	square yards.
Concrete sidewalks laid	1,996	square yards

During the quarter the following work was completed:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of Order.	
June 15, 1893,	*Veazie street, from Douglas avenue to Branch.*
Sept. 21, "	*Aleppo street, from Manton avenue to its westerly termination.*
" " "	*Daboll street, from Bucklin to Dexter.*
" " "	*Dean street, from Atwell's avenue to Cedar street.*
" " "	*Unit street, from Maynard to Atwell's avenue.*
" " "	*Charles street, from West River to Branch avenue.*

TO TAKE POSSESSION, REMOVE OBSTRUCTIONS AND GRADE.

June 2, 1892,	*Bucklin street, from Daboll to Cromwell.*
Oct. 5, 1893,	*Hamburg avenue, from Burrington street to Pacific avenue.*
" " "	*Pacific avenue, from Hamburg to Balch street.*
" " "	*Balch street, from Pacific avenue to Jackson avenue.*

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To Grade and Put in Good Condition.

June 15, 1893, *Gordon avenue, from Colfax street to Public.*

To be Paved with Granite Blocks.

No. of resolution.	Date of approval.	
265.	May 17, 1893,	*Canal street, from Bowen to Smith.*
580.	Oct. 6, "	*Aleppo street, from Manton avenue to opposite the Riverside Mills.*
581.	" " "	*Crawford street, from South Main to South Water.*
633.	" " "	*Stevens street, from Charles to Hewes.*

To Macadamize.

303. May 20, 1893, *Smith street, from River avenue to city line.*

To Grade and Put in Good Condition.

429. July 11, 1893, *Academy avenue, from Chalkstone to Smith street.*

To Repair.

543. Sept. 23, 1893, *Stewart street, from Westminster to Broad.*

567. " " " *Sixth Police District, sidewalks around poles of Police Signal System.*

The following work was in progress December 31, 1893, viz.:

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SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
June 15, 1893,	*North street, from North Main to Swan Point road:*—nearly completed.
Sept. 21, "	*Balch street, from Pacific avenue to Jackson:*—gutters to be concreted.
" " "	*Grove street, from Harris avenue to Valley street:*—gutters to be concreted.
" " "	*Hamburg avenue, from Burrington street to Pacific avenue:*—gutters to be concreted.
" " "	*Langdon street, from Sherman to Hagan:*—curbing set.
" " "	*Pacific avenue, from Hamburg to Balch street:*—gutters to be concreted.
" " "	*River street, from Grove to the Woonasquatucket river:*—gutters to be concreted.
Oct. 19, "	*Duncan avenue, from North Main street to Knowles:*—graded.
" " "	*Adelphi avenue, from Elmgrove to Wayland:*—to be rolled and gutters concreted.
" " "	*Blackstone street, from Friendship to Prairie avenue:*—gutters to be concreted.
" " "	*Quade street, from bend in said street to Hawes street:*—to be rolled and gutters concreted.
" " "	*Superior street, from Cranston to Wendell:*—gutters to be concreted.
" " "	*Wendell street, from Cranston to Messer:*—gutters to be concreted.
" " "	*Inkerman street, from Candace to Pekin:*—to be rolled and gutters concreted.

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Date of order.		
Oct. 19,	1893,	*Hawes street, from Charles to Black:*—to be rolled and gutters concreted.
Nov. 16,	"	*Pavilion avenue, from Prairie to Eddy street:*—in process.
" "	"	*Pearl street, from Prairie avenue to Beacon:*—to be rolled.

TO CONSTRUCT CHANNEL FOR STORM WATER.

No. of resolution.	Date of approval.	
331. June 6,	1893,	*Vale street, across Danforth street on to the land owned by the city:*—gutter to be completed.

TO GRADE AND PUT IN GOOD CONDITION.

693. Dec. 2,	1893,	*Promenade street, from Holden to Hemlock:*—in process.

The following work, ordered by the board of aldermen and city council, had not commenced December 31, 1893, viz.:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.		
Sept. 21,	1893,	*Congdon street, from Halsey to the north side of Hidden.*
Oct. 19,	"	*Arnold street, from Hope to Brook.*
" "	"	*Admiral street, from Whipple to Mowry.*
Nov. 16,	"	*Congress avenue, from Melrose street to Elmwood avenue.*
" "	"	*Swan street, from Plain to Eddy.*
" "	"	*Laura street, from Broad to Hamilton.*
Dec. 21,	"	*Camp street, from Evergreen to Rochambeau avenue.*
" "	"	*Canton street, from Regent avenue to Chalkstone.*
" "	"	*Carleton street, from Beaufort to Chalkstone avenue.*

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Date of order.	
Dec. 21, 1893,	*Cedar street, from Brayton avenue to Acorn street.*
" " "	*Elton street, from Elmgrove avenue to Wayland.*
" " "	*Jewett street, from Senter to its westerly termination.*
" " "	*Senter street, from Smith to West Park.*
" " "	*Bergen street, from Regent avenue to Chalkstone.*
" " "	*Carrington avenue, from Camp street to East avenue.*
" " "	*Dale street, from Atwell's avenue to West Exchange street.*
" " "	*Redwing street, from Elmwood avenue to the land of the N. Y., N. H. & H. R. R. Co.*

TO TAKE POSSESSION, GRADE AND PUT IN GOOD CONDITION.

Sept. 7, 1893,	*Harris avenue, from Acorn street to Kinsley avenue.*

TO BE PAVED WITH GRANITE BLOCKS.

No. of resolution.	Date of approval.	
265.	May 17, 1893,	*South Main street, from Planet to James.*
631.	Nov. 3, "	*Jackson street, from Westminster to Carpenter.*
760.	Dec. 22, "	*East street, from Tockwotton to Wickenden; and Wickenden street, from the west side of Hope street to the east side of East street.*

TO BUILD AND CURB.

780. Dec. 3, 1892,	*Gaspee street, from Cove to Promenade.*

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To be Paved with Brick.

No. of resolution.	Date of approval.	
630.	Nov. 3, 1893,	*Clemence street, from Westminster to Washington.*
632.	" " "	*Pine street, from Beacon avenue to Broad street.*

To Widen Roadway.

629.	Nov. 3, 1893,	*Clemence street, from Westminster to Washington.*

To Curb.

692.	Dec. 2, 1893,	*Goddard street, adjoining Candace street school estate.*

Bills approved on account of highways from October 1 to December 31, 1893, inclusive, amounted to:

Regular appropriation	$56,339 20	
Special appropriation	92,636 04	
		$148,975 24

Classified as follows:

Repairs on unpaved streets	$13,544 39	
Cleaning streets	12,867 73	
Crushed stone, material and labor	6,720 00	
Repairs on paved streets	6,218 39	
Barn expenses	2,971 27	
Tools, implements, etc	2,305 19	
Blacksmith and wheelwright shop	2,065 64	
Screening gravel	1,291 06	
Steam rollers—repairs and supplies	774 18	
Horses, wagons, harnesses, etc	746 91	
Removing snow and ice	741 56	
Salaries—superintendent and clerks	741 00	
Stone—paving and crosswalk	739 88	
Repairs on stone crushers	611 61	
Sundries	442 78	
Watchman at city wharf	327 10	
Labor on materials	229 40	
Watchman at city yard	204 75	
Building driveways, etc	201 75	
Fencing streets—material and labor	55 76	
Office expenses, city yard	35 63	
Watering streets	25 17	
Repairing sidewalks and driveways opposite public buildings	13 67	
		$53,874 82
Amount carried forward		$53,874 82

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Amount brought forward.....		$53,874 82

WORK—BUILDING AND REBUILDING STREETS, ETC.

SIDEWALKS CURBED AND GUTTERS PAVED.

hi avenue, from Elmgrove to Wayland.....	$792 41	
n street, from River avenue to Cornell street..	57 38	
gton avenue, east side, from Angell street to ving avenue.....	91 58	
ont street, from Ocean to Eddy.....	339 15	
street, from Pacific avenue to Jackson.....	649 65	
stone street, from Friendship to Prairie venue.....	3,914 27	
lin street, from Burnett to Oakland.....	169 26	
es street, from West river to Branch avenue...	9,552 08	
ll street, from Regent avenue to Valley street.	111 79	
l street, from Bucklin to Dexter.....	2,190 52	
street, from Atwell's avenue to Cedar street..	2,165 16	
r street, from Cromwell to Potter's avenue....	83 53	
las street, from Ives to Butler avenue.....	929 15	
an avenue, from North Main street to Knowles.	1,013 58	
street, from Pitman to Tockwotton.....	2,058 65	
street, from Harris avenue to Valley street..	1,643 78	
burg avenue, from Burrington street to Pacific venue.....	1,516 44	
s street, from Charles to Black.....	1,041 75	
man street, from Candace to Pekin.....	1,326 38	
n street, from Amherst to Atwell's avenue....	74 15	
uth street, from Hyat to Pope.....	29 95	
don street, from Sherman to Hagan.....	2,254 64	
gton avenue, from Elmwood to Melrose street.	446 38	
tt street, from Olney to Bates.....	28 52	
h street, from North Main to Swan Point road..	12,018 38	
ard avenue, from Wayland to Butler.....	1,202 01	
fic avenue, from Hamburg to Balch street.....	638 87	
ell street, from Atwell's avenue to its northerly rmination.....	555 25	
lion avenue, from Prairie to Eddy street.....	4,030 36	
l street, from Prairie avenue to Beacon.....	825 38	
le street, from bend in said Quade to Hawes....	536 14	
nt avenue, from River to Cornell street.....	116 99	
street, from Grove to Woonasquatucket river...	2,317 17	
n street, from Regent avenue to Allston street..	84 45	
rior street, from Cranston to Wendell.....	1,008 65	
street, from Maynard to Atwell's avenue.....	2,170 31	
ie street, from Douglas avenue to Branch.....	2,359 32	
dell street, from Cranston to Messer.....	2,497 45	
ple street, from Admiral to Douglas avenue....	67 56	
l street, from Messer to Ellery.....	172 62	
		63,081 06
Amount carried fowward.....		$116,955 88

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Amount brought forward		$116,933 88
Paved with Granite Blocks.		
Aleppo street, from Manton avenue to a point opposite the property of the Riverside Mills	$6,697 21	
Canal street, from Bowen to Smith	2,642 03	
Charles street, from Randall square to near Ashburton street	13 40	
Crawford street, from South Main to South Water	$1,025 60	
Page street, from Weybosset to Pine	10 55	
Stevens street, from easterly side of Charles to Hewes	2,416 82	
Westminster and Weybosset streets	6 40	
Wickenden street, from Transit to Brook	40 15	
		12,852 16
Pave with Bricks.		
Eagle street, from Harris avenue to Kinsley	$1,408 88	
Harkness court, from Pine street to Weybosset	111 77	
Mathewson street, from Washington to Cove	1,202 35	
Weybosset street, from Custom House to Post Office court	8 96	
		2,731 96
To be Built.		
Elmwood avenue, from Lexington to the railroad bridge		489 71
To be Brought to Grade.		
Butler avenue, from its southerly terminus to North street		719 17
Take Possession, Remove Obstructions and Grade.		
Bucklin street, from Daboll to Cromwell		890 07
Grade and Put in Good Condition.		
Academy avenue, from Chalkstone to Smith street	$6,831 53	
Gordon avenue, from Colfax street to Public	910 63	
Promenade street, from Holden to Hemlock	1,397 65	
		9,139 81
Macadamize.		
Smith street, from River avenue to city line		2,052 84
Repair.		
Stewart street, from Westminster to Broad	$536 68	
Sixth Police District, sidewalks around poles of police signal system	27 00	
		563 68
Amount carried forward		$146,395 32

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Amount brought forward.....	$146,395 32
BUILD STORM SEWER.	
Through land of Riverside Mills, from Aleppo street to the Woonasquatucket river.....	1,053 17
CONSTRUCT CHANNEL FOR STORM WATER.	
Vale street, across Danforth on to the land owned by the city.....	1,526 75
	$148,975 24

Bills deposited with the city treasurer for collection from October 1 to December 31, 1893, inclusive, amounted to $5,101 29

As follows:

Union Railroad Company, for granite blocks, etc...	$2,657 47
Labor and materials.....	2,185 56
Street sweepings.....	100 00
Discharging curbing at city wharf.....	86 26
Manure from barn.....	62 00
Removing trees.....	10 00
	$5,101 29

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $10,578 04

As follows:

Union Railroad Company, for granite blocks, etc...	$8,612 26
Labor and materials.....	1,707 52
Street sweepings.....	100 00
Discharging curbing at city wharf.....	86 26
Manure from barn.....	62 00
Removing trees.....	10 00
	$10,578 04

SIDEWALKS AND CURBING.

The expenditures on account of sidewalks and curbing from October 1 to December 31, 1893, inclusive, were $24,622 28

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Classified as follows:

Granite curbing	$24,390 07	
Concreting sidewalks	232 21	
	$24,622 28	

Curbing bills deposited with the city treasurer for collection from October 1 to December 31, 1893, inclusive, amounted to . . $5,816 23

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . $1,359 78

CITY ENGINEER.

Bills approved on account of the city engineer's department from October 1 to December 31, 1893, inclusive, amounted to . . $14,238 08

Charged as follows:

Salary—city engineer	$1,500 00	
Salaries of assistants	11,060 67	
Salaries of clerks	763 75	
Horse-car tickets, etc	560 00	
Supplies—drawing materials, etc	239 08	
Sundries	76 73	
Horse hire, barn expenses, etc	22 50	
Instruments and repairs	15 35	
	$14,238 08	

Bills deposited with the city treasurer for collection from October 1 to December 31, 1893, inclusive, amounted to $5 17

As follows:

Blue process paper	$3 13
Tracing paper	2 04
	$5 17

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During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $4 66

As follows:

Blue process paper	$2 62
Tracing paper	2 04
	$4 66

BRIDGES.

The following order was rescinded by Resolution No. 641, approved Nov. 7, 1893, viz.:

No. of resolution.	Date of approval.	
448.	July 22, 1893,	*Adelaide avenue, over tracks of the N. Y., N. H. and H. R. R. Co.*

During the quarter the following work was completed, namely:

No. of resolution.	Date of approval.	
466.	Aug. 2, 1892,	*Washington bridge over Providence river:*—to build bridge and abutment walls.
641.	Oct. 8, "	*City Dock:*—to purchase materials and build.

The following work was in progress at the end of the quarter, viz.:

No. of resolution.	Date of approval.	
830.	Dec. 20, 1892,	*Francis street bridge over Woonasquatucket river.*

The following work had not commenced December 31, 1893, viz.:

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No. of resolution.	Date of approval.	
831.	Dec. 20, 1892,	*Oak street foot-bridge over railroad tracks.*

Bills approved on account of bridges from October 1 to December 31, 1893, inclusive, amounted to $10,198 60

Charged as follows:

Barn expenses	$ 91 72
Branch avenue bridge	125 75
Branch avenue culvert	70
Building at city yard	9 97
Cemetery street bridge	4 06
Central or Red bridge	79 07
Charles street bridge	4 71
Crawford street bridge	14 05
Delaine street bridge	16 37
Eagle street bridge	5 21
Gaspee street bridge	12 65
Hawkins street bridge	1 70
Horses, wagons, harnesses. etc	31 66
Lumber, hardware, etc	46 70
Mill street bridge	7 92
Nash lane bridge	1 38
Park street bridge	11 87
Point street bridge	408 79
Rent of keeper's house, Washington bridge	30 00
Salaries—Central or Red bridge	476 00
Salaries—Point street bridge	1,006 25
Salaries—Washington bridge	496 00
Smithfield avenue bridge	3 47
Stevens street bridge	19 26
Sundries	127 68
Tar bridge, Manton avenue	7 41
Tools	137 81
Veazie street bridge	17 99
Wanskuck bridge	1 70
Washington bridge, near India Point	439 35
Washington bridge, over Providence river—to rebuild	6,545 34
West River street bridge	4 37
Weybosset bridge	2 56
Whelden street bridge	9 13
	$10,198 60

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Bills approved from October 1 to December 31, 1893, inclusive, for construction of piers for the Francis street bridge, have been paid from the appropriation for filling the cove basin, to the amount of $8,885 92

Bills for expenditures for construction of wharf at the new city dock from October 1 to December 31, 1893, inclusive, have been approved and paid from the appropriation for contingencies, to the amount of $3,428 57

Bills deposited with the city treasurer for collection from October 1 to December 31, 1893, inclusive, amounted to $152 65

As follows:

Old lumber	$112 28
Old wire cable	28 52
Repairing Point street bridge	11 85
	$152 65

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $140 80

As follows:

Old lumber	$112 28
Old wire cable	28 52
	$140 80

ROBERT E. SMITH,

Commissioner.

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TY DOCUMENT. [No. 17.

RTY-FIFTH

ERLY REPORT

OF THE

it of Public Works

OF THE

F PROVIDENCE, R. I.

ENDING MARCH 31, 1894.

The Providence Press:
Farnham, City Printers,
Custom House Street.
1894.

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FORTY-FIFTH QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING MARCH 31, 1894.

The Providence Press:
Snow & Farnham, City Printers,
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REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., April 1, 1894.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the forty-fifth quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and cost of same for the quarter ending March 31, 1894.

WATER WORKS.

January 25th, under authority conveyed by Resolution No. 770, series of 1893, a portion of the Aldridge farm, situated in the town of Cranston, was sold to George B. Arnold.

January 2d, the offer of Coffin Valve Company, of Neponset, Mass., to furnish the following water gates and fire hydrants was accepted, viz.:

10 2½-inch water gates,
20 4-inch water gates,
130 6-inch water gates,
10 8-inch water gates,
2 12-inch water gates,
25 6-inch fire hydrants, boxes and covers.

Amount, $5,220.00.

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The average daily consumption of water during the last quarter was 9,088,823 gallons.

Work had not commenced laying water pipes as follows, March 31, 1894:

No. of resolution.	Date of approval.	
724.	Dec. 8, 1893,	*In Roger Williams Park.*

Statement of sizes and lengths of water pipe laid since the commencement of the work:

36-inch	10,084.00 feet.
30-inch	59,893.04 feet.
24-inch	43,553.03 feet.
20-inch	9,626.59 feet.
16-inch	33,243.82 feet.
12-inch	77,754.09 feet.
10-inch	14,652.26 feet.
8-inch	225,358.01 feet.
6-inch	966,634.30 feet.
Total	1,440,799.14 feet,

or 272.879— miles.

Five fire hydrants have been set during the quarter, one in each of the following locations:

Blackstone boulevard, west side, about 318 feet north of President avenue.
Lincoln avenue, northwest corner of Blackstone boulevard.
Park avenue, Cranston, north side, about 30 feet west of Reservoir avenue.
Park avenue, Cranston, north side, about 201 feet east of Seymour avenue.
Regent avenue, south side, east corner of Canton street.

The total number of fire hydrants is now fifteen hundred and eighty-one: fifteen hundred and twenty-seven flush and fifty-four post hydrants.

During the quarter three hundred and thirty water meters were set, of which number seven were to replace other meters. The use of four meters was discontinued.

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The following meters were in use at the close of the quarter:

Kind.	Size.								Total.
	⅝-in.	¾-in.	1-in.	1½-in.	2 in.	3-in.	4-in.	6-in.	
Ball & Fitts, piston	3,064	610	146	34	5				3,859
Ball & Fitts, rotary			22	20	2	5	2		51
Crown	5,739	659	174	76	25	11	10		6,694
Fales, Jenks & Sons			1						1
Neptune	28								28
Thomson	1,431	226	51	36	14	3	3	3	1,767
Worthington	4	1			1		1		7
	10,266	1,496	394	166	47	19	16	3	12,407

Ninety plumbers' licenses were issued during the quarter, all of which expire December 31, 1894.

Seven hundred and fifty-seven permits to do plumbing were issued during the quarter.

One hundred and three applications for water were made during the quarter, making the total number March 31, 1894, nineteen thousand four hundred and fifty-five.

The number of new service stops opened during the quarter was ninety-seven.

The total number of service stops opened to March 31, 1894, inclusive, was eighteen thousand seven hundred and thirty-three. The number in actual use March 31, 1894, was seventeen thousand four hundred and twenty-eight.

The amount of bills approved on account of water works from January 1 to March 31, 1894, inclusive, was:

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For construction and extension, . . $55,133 50

Classified as follows:

Worthington high duty pumping engine	$28,010 65	
Cast iron water pipe	13,593 45	
Stop valves	2,670 59	
Special castings	2,619 38	
Fire hydrants, boxes and covers	2,575 51	
Laying water pipe	1,611 78	
Taps and stops	1,105 93	
Experimental tests of water filtration	766 68	
Laying service pipe	650 72	
Labor on and carting pipe	577 11	
Tools	296 00	
Wharf salaries	195 00	
Service pipe	189 33	
Barn expenses	178 63	
Watchman at city wharf	46 50	
Horses, wagons, harnesses, etc	46 24	
		$55,133 50

For maintenance, ... $19,046 29

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$3,094 90	
Firemen	825 90	
Sundries	701 49	
Engineers	575 50	
Superintendence	299 00	
Worthington pumping engine	216 26	
Labor on fuel	85 35	
Cornish engine house	73 39	
Oil, waste and packing	47 93	
Lights	43 70	
Barn expenses	38 70	
Cornish pumping engine	22 95	
Corliss pumping engine and house	11 23	
Care of grounds	8 70	
Real estate	4 25	
		$6,049 25

SOCKANOSSET RESERVOIR.

Watchman	$209 00	
Sundries	92 22	
		301 22
Amount carried forward		$6,350 47

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Amount brought forward		$6,350 47
HOPE PUMPING STATION.		
Engineers	$575 25	
Firemen	462 60	
Lights	121 21	
Sundries	42 33	
Care of grounds	15 75	
Hope pumping engine, No. 1	7 55	
Oil, waste and packing	1 01	
Hope pumping engine, No. 2	24	
		1,225 94
HOPE RESERVOIR.		
Watchman	$204 75	
Sundries	98 49	
		303 24
FRUIT HILL RESERVOIR.		
Watchman	$204 75	
Sundries	62 44	
		267 19
PIPE LINE AND SERVICE STOPS.		
Repairs	$1,471 99	
Superintendence—salaries	848 25	
		2,320 24
METER DEPARTMENT.		
Water meters	$3,262 60	
Setting and repairing meters	1,640 76	
		4,903 36
MISCELLANEOUS.		
Clerks' and inspectors' salaries	$2,874 59	
Prevention of defilement of the Pawtuxet	433 36	
Barn expenses	148 17	
Analyses of water	90 00	
Sundries	79 26	
Pipe yard, office expenses	26 45	
Horses, wagons, harnesses, etc	19 44	
Public drinking fountains and troughs	3 50	
Thawing services, etc	1 08	
		3,675 85
		$19,046 29

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The amount of expenditures from January 1 to March 31, 1894, inclusive, was . . $74,179 79

The total expenditures to March 31, 1894, inclusive, were $7,874,366 09

The *net* expenditure for construction and extension from January 1 to March 31, 1894, inclusive, was..... $54,373 51

The *net* expenditure for construction and extension to March 31, 1894, was..... $5,997,866 45

The *net* expenditure for maintenance from January 1 to March 31, 1894, inclusive, was..... $11,410 90

The *net* expenditure for maintenance to March 31, 1894, inclusive, was..... $1,171,383 05

Bills deposited with the city treasurer for collection, from January 1 to March 31, 1894, inclusive, amounted to $298,214 64

As follows:

Water.....	$290,153 86
Water meters.....	5,331 25
Setting and repairing meters.....	1,562 25
Rent of real estate.....	389 09
Penalties.....	170 00
Permanently closing service stops.....	60 00
Examination and repairs of pipe line.....	12 50
Labor and material, laying service pipes, etc.....	391 83
Cast iron water pipe.....	109 36
Use of engine discharging cargo of water pipe.....	22 50
Manure from barn.....	12 00
	$298,214 64

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $290,391 76

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As follows:

Water	$281,826 38
Water meters	5,451 25
Setting and repairing meters	1,834 05
Rent of real estate	279 59
Penalties	170 00
Permanently closing service stops	60 00
Examination and repairs of pipe line	12 50
Labor and material—laying service pipes, etc	621 93
Cast iron water pipe	101 56
Use of engine discharging cargo of water pipe	22 50
Manure from barn	12 00
	$290,391 76

SEWERS.

During the quarter ending March 31, 1894, one hundred and seventy-one permits were issued to drain layers: one hundred and six for new work and sixty-five for extension and repairs of drains.

Forty-seven drain layers' licenses were issued during the quarter, all of which expire December 31, 1894.

During the quarter assessments for the cost of constructing sewers were certified to the city treasurer, as follows:

Camp, North and North Main streets	$12,899 93
Vineyard street	615 70
Blackstone and Bogman streets	6,647 02
Harris avenue	142 96
Eagle street	2,590 41
Manton avenue	4,226 82
Grant street	1,379 78
Stampers street	1,620 42
Cromwell street	2,566 09
Eddy and Ashmont streets	10,312 34
Hospital street	683 31
Elmgrove avenue	1,208 00
Hawes and Quade streets	2,197 81
A and Rice streets	1,748 62
Potter street	225 99
Winslow street	510 80
Amount carried forward	$49,576 00

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Amount brought forward	$49,576 00
Adelphi avenue	644 00
Fountain street	1,272 57
Candace, Winsor, Orms, Valley and Smith streets	18,722 37
Chalkstone avenue	1,390 80
Chalkstone avenue	1,271 15
Bernon street	3,097 08
Jessamine, Brattle and Waldo streets	8,562 49
Burnside and Briggs streets	8,046 89
Federal street	141 87
Inkerman street	933 99
Pacific street	4,045 93
Lexington avenue	2,032 64
Lilac street	3,656 42
Moore street	1,863 03
Elmwood avenue	12,113 59
Adelaide avenue	1,909 36
Adelaide avenue	170 16
Plain street and Thurbers avenue	15,372 74
Rhodes and Eddy streets	8,372 26
Grove, Helme and River streets	3,968 26
Total	$147,163 60

February 20th, contracts for the construction of the following sewers, which were subsequently executed, were awarded as follows, namely:

[The amounts given below are what are estimated will be paid the contractors for labor, and do not include the cost of inspection and materials, or rock excavation.]

To Frederick E. Shaw.

No. of resolution.	Date of approval.				
599.	Oct.	20,	1893,	*Alma street, from Candace to Pekin,*	$360 40
603.	"	"	"	*Wayne street, from Douglas avenue to Candace street,*	1,061 50
700.	Dec.	2,	1893,	*Westfield street, from Elmwood ave. to Harrison street,*	720 55
55.	Jan.	19,	1894,	*Elmwood avenue and Roger Williams park,*	13,554 10

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No. of resolution.	Date of approval.				
92.	Feb.	16,	1894,	*Atlantic avenue, from Broad street to Hamilton,* . .	$924 30

To JAMES J. NEWMAN.

No. of resolution.	Date of approval.				
546.	Sept.	23,	1893,	*Jewett and Senter streets,* . . .	3,531 35
52.	Jan.	19,	1894,	*Canton and Bergen streets,*	2,112 20

To GEORGE R. NEWMAN & Co.

No. of resolution.	Date of approval.				
602.	Oct.	20,	1893,	*Public street, from Prairie avenue to Ocean street,* . .	542 10
698.	Dec.	2,	"	*Logan avenue, from Plain street to Ocean,*	290 77
699.	"	"	"	*Mitchell street, from Broad to Melrose,*	1,251 30
54.	Jan.	19,	1894,	*Douglas avenue, from Whipple street to Orms,* . . .	1,784 34
58.	"	"	"	*Potters avenue, Sherburne and Swan streets,* . .	2,219 50
59.	"	"	"	*Wilson street, from Harrison to Dexter,*	180 70

To TIMOTHY F. LYONS.

No. of resolution.	Date of approval.				
697.	Dec.	2,	1893,	*Harris avenue, from Broadway to Grove street,*	1,801 25

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TO EVERSON & LIDDLE.

No. of resolution.	Date of approval.				
56.	Jan.	19,	1894,	*Olney street, from Brenton avenue, easterly,* . . .	$137 60
57.	"	"	"	*Oriole avenue, Elton street and Adelphi avenue,* . .	1,811 80
93.	Feb.	16,	"	*East Manning street, from Gano to Wayland avenue,* . . .	727 70

During the quarter the construction of the following sewers was completed, namely:

No. of resolution.	Date of approval.				Date of completion.
311.	May	20,	1893,	*Camp, North and North Main streets,*	Jan. 10, 1894
699.	Dec.	2,	"	*Mitchell street, from Broad to Melrose,* . .	March 31, 1894

At the close of the quarter work upon the following sewers of the improved sewerage system was in progress, namely:

No. of resolution.	Date of approval.			
138.	Mar.	21,	1893,	*Norfolk and Station streets, Huntington avenue, Chambers and Burrington streets.*
564.	Sept.	23,	"	*Section* 10, *Allens avenue Division.*
564.	"	"	"	*Section* 11, *Allens avenue Division.*
564.	"	"	"	*Section* 12, *Allens avenue Division.*

Work upon the following lateral sewers was in progress at the close of the quarter, namely:

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No. of resolution.	Date of approval.			
372.	June	16,	1893,	*Wickenden, South Main and Crawford streets.*
56.	Jan.	19,	1894,	*Olney street, from Brenton ave-easterly.*
58.	"	"	"	*Potters avenue, Sherburne and Swan streets.*

Work upon the following sewers, completing the work ordered by the city council, had not commenced March 31, 1894, namely:

No. of resolution.	Date of approval.			
546.	Sept.	23,	1893,	*Jewett and Senter streets.*
564.	"	"	"	*Section* 13, *Woonasquatucket river Division.*
564.	"	"	"	*Section* 14, *Woonasquatucket river Division.*
599.	Oct.	20,	"	*Alma street, from Candace to Pekin.*
602.	"	"	"	*Public street, from Prairie avenue to Ocean street.*
603.	"	"	"	*Wayne street, from Douglas avenue to Candace street.*
697.	Dec.	2,	"	*Harris avenue, from Broadway to Grove street.*
698.	"	"	"	*Logan avenue, from Plain street to Ocean.*
700.	"	"	"	*Westfield street, from Elmwood avenue to Harrison street.*
51.	Jan.	19,	1894,	*Academy avenue, from Beaufort street to Dover, and from Regent avenue to Cambridge street.*
52.	"	"	"	*Canton and Bergen streets.*
54.	"	"	"	*Douglas avenue, from Whipple street to Orms.*
55.	"	"	"	*Elmwood avenue and Roger Williams park.*

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No. of resolution.	Date of approval.	
57.	Jan. 19, 1894,	*Oriole avenue, Elton street and Adelphi avenue.*
59.	" " "	*Wilson street, from Harrison to Dexter.*
92.	Feb. 16, "	*Atlantic avenue, from Broad street to Hamilton.*
93.	" " "	*East Manning street, from Gaspee to Wayland avenue.*

The amount of bills approved on account of sewers from January 1 to March 31, 1894, inclusive, was:

For Construction:

Regular appropriation	$28,031 92	
Improved sewerage appropriation	51,062 92	$79,094 8

Charged as follows:

Materials	$22,731 11
Contract reservations	10,553 00
Salaries of assistant engineers	2,706 50
Clerks' salaries	968 65
Sundries—improved sewerage system	901 67
Rent of wharf and pipe yard	750 00
Sundries	364 24
Testing cement	132 75
Watchman at city wharf	112 00
Tools	39 05
Sewer in Camp, North and North Main streets	2,244 05
Sewer in Mitchell street, from Broad to Melrose	1,407 45
Sewer in Elmwood avenue and Roger Williams park.	344 17
Sewer in Olney street, from Brenton avenue easterly.	662 80
Sewer in Potters avenue, Sherburne and Swan streets	344 58
Sewer in Wickenden, South Main and Crawford streets	161 45
Sewer in Allens avenue Division, Section 10	1,728 80
Sewer in Allens avenue Division, Section 11	56 35
Sewer in Allens avenue Division, Section 12	3,205 31
Sewer in Norfolk and Station streets	19,790 14
Sewer in Promenade street, from Rathbone to Gaspee	163 80
Grading Norfolk street, from Oak to Cranston	6,687 84
Grading land on Allens avenue for pumping station.	1,708 80
	$79,094 51

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For maintenance, ... $6,177 25

Charged as follows:

Cleaning basins and sewers	$3,013 83
Repairing basins and sewers	872 76
Inspection of connections	831 16
Salary—superintendent	390 00
Horses, wagons, harnesses, etc	269 28
Barn expenses	250 78
Cleaning and repairing old drains	218 30
Tools	193 18
Sundries	77 16
Cleaning private connections	59 00
Filling cisterns, etc	1 80
	$6,177 25

The *net* expenditure for construction of sewers to March 31, 1894, inclusive, was $4,522,443 07

The *net* expenditure for maintenance of sewers to March 31, 1894, inclusive, was $410,874 96

Bills deposited with the city treasurer for collection from January 1 to March 31, 1894, inclusive, amounted to $134 45

As follows:

Cleaning private connections	$104 00
Repairing roadway over sewer in Balch street	10 50
Filling cisterns, etc	6 00
Laying drains to curbstone	13 95
	$134 45

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $137 95

As follows:

Cleaning private connections	$99 00
Repairing roadway over sewer in Balch street	10 50
Filling cisterns, etc	8 00
Cleaning sewer in Potter street	3 00
Laying drains to curbstone	13 95
Sewer material	3 50
	$137 95

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HIGHWAYS.

Four permits to open streets were issued during the quarter.

January 3d, the proposal of Benjamin F. Smith to furnish and deliver in this city

250 pieces circular curbing, 10 feet radius,
200 pieces circular curbing, 8 feet radius,
4,000 lineal feet 14-inch crosswalk stone,
1,000 lineal feet 18-inch crosswalk stone,

was accepted and a contract was subsequently executed. Amount, $3,566,46.

Statements have been prepared of the cost of curbstones set, ascertained by the commissioner and certified to the board of aldermen for approval, as follows :

Adelphi avenue, from Elmgrove to Wayland	$ 563 86
Ashmont street, from Ocean to Eddy	1,327 50
Balch street, from Pacific avenue to Jackson	471 74
Gano street, from Pitman to Tockwotton	2,679 77
Hamburg avenue, from Burrington street to Pacific avenue	1,150 19
Marlborough avenue, from Broad street to Taylor	890 24
Pacific avenue, from Hamburg to Balch street	149 93
Princeton avenue, from Greenwich street (now Elmwood avenue) to Bucklin street	964 17
Salem street, from Potters avenue to Waldo street	947 14
Butler avenue, from Orchard to Elton street	319 63
Butler avenue, (now Blackstone boulevard) from Elton street to North (now Rochambeau avenue)	6,576 71
Parnell street, from Atwells avenue to its northerly termination	1,869 50
Unit street, from Maynard to Atwells avenue	1,216 35
Whipple street, from Admiral to Douglas avenue	2,187 29
Blackstone street, from Prairie avenue to Plain street	1,820 84
Bucklin street, from Burnett to Oakland	202 48
Inkerman street, from Candace to Pekin	589 73
Julian street, from Amherst to Atwells avenue	756 18
Kossuth street, from Hyat to Pope	258 38
Lexington avenue, from Elmwood to Melrose street	1,226 71
Pearl street, from Prairie avenue to Beacon	422 73
River street, from Grove to Woonasquatucket river	1,294 58
Blackstone street, from Friendship to Prairie avenue	2,061 09
Charles street, from the West river to Branch avenue	3,254 22
Amount carried forward	$33,110 94

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Amount brought forward	$33,110 94
Dean street, from Atwells avenue to Cedar street	733 88
Grove street, from Harris avenue to Valley street	762 17
Langdon street, from Sherman to Hagan	1,644 16
Veazie street, from Douglas avenue to Branch	2,175 91
Aleppo street, from Manton avenue to its westerly termination	1,231 84
Cornell street, from Regent avenue to Valley street	1,285 81
Delaine street, from Woonasquatucket river to Valley street	610 95
Dexter street, from Cromwell to Potters avenue	3,274 87
Douglas street, from Ives to Butler avenue	2,780 25
Hawes street, from Charles to Black	838 16
Mallett street, from Olney to Bates	410 22
Quaid street, from bend in said street to Hawes	467 08
Superior street, from Cranston to Wendell	555 18
Wendell street, from Cranston to Messer	1.327 24
Total	$51,208 66

During the quarter the following work was completed:

To Grade.

No. of resolution.	Date of approval.	
65.	Jan. 30, 1894,	*Allens avenue, near Ernest street.*
120.	Mch. 2, "	*Melrose street, from Adelaide avenue to Roger Williams.*

The following work was in progress March 31, 1894, viz.:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
June 15, 1893,	*North street, from North Main to Swan Point road:*—nearly completed.
Sept. 21, "	*Balch street, from Pacific avenue to Jackson:*—gutters to be concreted.
" " "	*Grove street, from Harris avenue to Valley street:*—gutters to be concreted.
" " "	*Hamburg avenue, from Burrington street to Pacific avenue:*—gutters to be concreted.
" " "	*Langdon street, from Sherman to Hagan:*—curbing set.

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Date of order.	
Sept. 21, 1893,	*Pacific avenue, from Hamburg to Balch street* :—gutters to be concreted.
" " "	*River street, from Grove to the Woonasquatucket river* :—gutters to be concreted.
Oct. 19, "	*Duncan avenue, from North Main street to Knowles* :—graded.
" " "	*Adelphi avenue, from Elmgrove to Wayland* :—to be rolled and gutters concreted.
" " "	*Blackstone street, from Friendship to Prairie avenue* :—gutters to be concreted.
" " "	*Quade street, from bend in said street to Hawes street* :—to be rolled and gutters concreted.
" " "	*Superior street, from Cranston to Wendell* :—gutters to be concreted.
" " "	*Wendell street, from Cranston to Messer* :—gutters to be concreted.
" " "	*Inkerman street, from Candace to Pekin* :—to be rolled and gutters concreted.
" " "	*Hawes street, from Charles to Black* :— to be rolled and gutters concreted.
Nov. 16, "	*Pavilion avenue, from Prairie to Eddy street* :—in process.
" " "	*Pearl street, from Prairie avenue to Beacon* :—to be rolled.

TO CONSTRUCT CHANNEL FOR STORM WATER.

No. of resolution.	Date of approval.	
331.	June 6, 1893,	*Vale street, across Danforth street on to the land owned by the city* :—gutter to be completed.

TO GRADE AND PUT IN GOOD CONDITION.

693.	Dec. 2, 1893,	*Promenade street, from Holden to Hemlock* :—in process.

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To Grade.

No. of resolution.	Date of approval.	
49.	Jan. 19, 1894,	*Huntington avenue, from Cranston street to Chambers:*—one-half completed.
50.	" " "	*Norfolk street, from Oak to Cranston:*—one-half completed.

To Repair.

77.	Feb. 2, 1894,	*Bath street:*—two-thirds completed.
78.	" " "	*Jewett street:*—two-thirds completed.
79.	" " "	*Okie street:*—two-thirds completed.
80.	" " "	*West Park street:*—two-thirds completed.

The following work, ordered by the board of aldermen and city council, had not commenced March 31, 1894, viz.:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
Sept. 21, 1893,	*Congdon street, from Halsey to the north side of Hidden.*
Oct. 19, "	*Arnold street, from Hope to Brook.*
" " "	*Admiral street, from Whipple to Mowry.*
Nov. 16, "	*Congress avenue, from Melrose street to Elmwood avenue.*
" " "	*Swan street, from Plain to Eddy.*
" " "	*Laura street, from Broad to Hamilton.*
Dec. 21, "	*Camp street, from Evergreen to Rochambeau avenue.*
" " "	*Canton street, from Regent avenue to Chalkstone.*

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Date of order.	
Dec. 21, 1893,	*Carleton street, from Beaufort to Chalkstone avenue.*
" " "	*Cedar street, from Brayton avenue to Acorn street.*
" " "	*Elton street, from Elmgrove avenue to Wayland.*
" " "	*Jewett street, from Senter to its westerly termination.*
" " "	*Senter street, from Smith to West Park.*
" " "	*Bergen street, from Regent avenue to Chalkstone.*
" " "	*Carrington avenue, from Camp street to East avenue.*
" " "	*Dale street, from Atwells avenue to West Exchange street.*
" " "	*Redwing street, from Elmwood avenue to the land of the N. Y., N. H. & H. R. R. Co.*
Feb. 15, 1894,	*Rochambeau avenue, from Olney street to Blackstone boulevard.*
" " "	*Helme street, from Harris avenue to Valley street.*
" " "	*Winslow street, from Weybosset to Broad.*

To Take Possession, Grade and Put in Good Condition.

Sept. 7, 1893,	*Harris avenue, from Acorn street to Kinsley avenue.*

To be Paved with Granite Blocks.

No. of resolution.	Date of approval.	
265.	May 17, 1893,	*South Main street, from Planet to James.*

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No. of resolution.	Date of approval.			
631.	Nov.	3,	1893,	*Jackson street, from Westminster to Carpenter.*
760.	Dec.	22,	"	*East street, from Tockwotton to Wickenden; and Wickenden street, from the west side of Hope street to the east side of East street.*
182.	Mar.	30,	1894,	*Olney street, from end of present pavement to Camp.*

TO BE PAVED WITH GRANITE BLOCKS, AND CURBED.

780.	Dec.	3,	1892,	*Gaspee street, from Cove to Promenade.*

TO WIDEN ROADWAY.

629.	Nov.	3,	1893,	*Clemence street, from Westminster to Washington.*

TO CURB.

692.	Dec.	2,	1893,	*Goddard street, adjoining Candace street school estate.*

TO GRADE AND PUT IN CONDITION.

76.	Feb.	2,	1894,	*Blackstone boulevard, from Rochambeau avenue to East.*

TO PAVE WITH BRICK OR TRINIDAD ASPHALT.

181.	Mch.	30,	1894,	*Clemence street, from Westminster to Washington.*
183.	"	"	"	*Pine street, from Beacon avenue to Broad street.*

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Bills approved on account of highways from January 1 to March 31, 1894, inclusive, amounted to:

Regular appropriation	$54,079 11	
Special appropriation	22,774 36	
Special credit appropriation	2,442 40	
		$79,295 87

Classified as follows:

Crushed stone—material and labor	$12,705 92	
Removing snow and ice	10,957 09	
Cleaning streets	9,135 51	
Screening gravel	7,468 76	
Barn expenses	2,411 20	
Blacksmith and wheelwright shop	2,028 99	
Tools, implements, etc	1,439 93	
Labor on materials	1,238 84	
Stone—paving and crosswalk	1,048 70	
Horses, wagons, harnesses, etc	913 99	
Steam rollers—repairs and supplies	903 17	
Repairs on paved streets	817 47	
Salaries—superintendent and clerks	741 00	
Repairs on stone crushers	545 41	
Sundries	281 70	
Repairs on unpaved streets	252 95	
Watchman at city yard	204 75	
Building driveways, etc	135 70	
Fencing streets—material and labor	68 14	
Office expenses—city yard	61 81	
Watchman at city wharf	49 00	
		$53,414 0

New Work—Building and Rebuilding Streets, Etc.

Sidewalks Curbed and Gutters Paved.

Hamburg avenue, from Burrington street to Pacific avenue	$ 35 00	
Hawes street, from Charles to Black	123 85	
Inkerman street, from Candace to Pekin	94 00	
Langdon street, from Sherman to Hagan	990 78	
Pavilion avenue, from Prairie to Eddy street	1,838 51	
Quade street, from bend in said Quade to Hawes	135 03	
		3,217 1
Amount carried forward		$56,631 2

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Amount brought forward		$56,631 20
Pave with Granite Blocks.		
Aleppo street, from Manton avenue to a point opposite the property of the Riverside Mills	$1,579 91	
Charles street, from Randall square to near Ashburton street	8,875 83	
Stevens street, from easterly side of Charles to Hewes	389 43	
		10,845 17
To be Brought to Grade.		
Huntington avenue, from Cranston street to Chambers	$2,030 47	
Melrose street, from Adelaide avenue to Roger Williams	2,442 40	
		4,472 87
Grade and Put in Good Condition.		
Promenade street, from Holden to Hemlock		6,681 55
Take Possession, Grade and Put in Good Condition.		
Harris avenue, from Acorn street to Kinsley avenue		645 24
Construct Channel for Storm Water.		
Vale street, across Danforth on to the land owned by the city		19 84
		$79,295 87

Bills deposited with the city treasurer for collection from January 1 to March 31, 1894, inclusive, amounted to . . $613 60

As follows:

Labor and materials	$345 60
Street sweepings	200 00
Manure from barn	62 00
Chopping blocks	6 00
	$613 60

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During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $1,335 3

As follows:

Labor and materials	$1,067 39
Street sweepings	200 00
Manure from barn	62 00
Chopping blocks	6 00
	$1,335 39

SIDEWALKS AND CURBING.

The expenditures on account of sidewalks and curbing from January 1 to March 31, 1894, inclusive, were (for granite curbing) . . . $200

Curbing bills deposited with the city treasurer for collection from January 1 to March 31, 1894, inclusive, amounted to $51,541

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $9,095

CITY ENGINEER.

Bills approved on account of the city engineer's department from January 1 to March 31, 1894, inclusive, amounted to $13,905

Charged as follows:

Salary—city engineeer	$ 1,500 00
Salaries of assistants	11,071 17
Salaries of clerks	763 75
Instruments and repairs	289 50
Supplies—drawing materials, etc	258 60
Sundries	22 15
	$13, 905 17

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Bills deposited with the city treasurer for collection from January 1 to March 31, 1894, inclusive, amounted to $84 59

As follows :

Measuring subways for Providence Telephone Co..	$69 35
Drawing paper.....	7 07
Steel tapes.....	4 17
Set of sewer diagrams.....	4 00
	$84 59

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $85 10

As follows :

Measuring subways for Providence Telephone Co.	$69 35
Drawing paper.....	7 24
Set of sewer diagrams.....	4 00
Steel tapes.....	4 00
Blue prints.....	51
	$85 10

BRIDGES.

March 2d, the offer of Frank F. Carpenter to furnish and deliver 37,000 feet, B. M., of spruce plank was accepted.

During the quarter the following work was completed, namely :

Date of order.

Feb 1, 1894, *Washington Row Driveway* :—to fence up.

The following work was in progress at the end of the quarter, namely :

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No. of resolution.	Date of approval.	
830.	Dec. 20, 1892,	*Francis street bridge over Wannasquatucket river.*
48.	Jan. 19, 1894,	*New City Yard, Henderson street:* —to grade and fence.

The following work had not commenced March 31, 1894, namely:

No. of resolution.	Date of approval.	
831.	Dec. 20, 1892,	*Oak street foot-bridge over railroad tracks.*

Bills approved on account of bridges from January 1 to March 31, 1894, inclusive, amounted to $5,538 58

Charged as follows:

Acorn street bridge—to build	$ 6 66
Atwells avenue bridge	2 85
Barn expenses	46 28
Building at city yard	16 53
Central or Red bridge	1,287 49
Delaine street bridge	14 50
Eagle street bridge	14 27
Exchange bridge	2 24
Horses, wagons, harnesses, etc	19 85
Lumber, hardware, etc	153 11
Park street bridge	1 00
Point street bridge	248 94
Rent of keeper's house, Washington bridge	30 00
Salaries—Central or Red bridge	435 00
Salaries—Point street bridge	978 25
Salaries—Washington bridge	500 38
Smithfield avenue bridge	12 00
Sundries	275 03
Tar bridge, Manton avenue	2 30
Tools	204 62
Valley street bridge—north span	2 85
Valley street bridge—south span	1 00
Washington bridge near India Point	180 68
Washington bridge over Providence river—to rebuild	1,073 65
Whelden street bridge	9 10
	$5,538 58

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Bills approved from January 1 to March 31, 1894, inclusive, for the construction of the Francis street bridge have been paid from the appropriation for filling the cove basin, to the amount of $35,991 95

Bills deposited with the city treasurer for collection from January 1 to March 31, 1894, inclusive, amounted to $8,611 21

As follows:

For completing the construction of Washington bridge over Providence river	$8,609 21	
For sweepings from Washington bridge near India Point	2 00	
	$8,611 21	

During the quarter coupons from bills collected (for sweepings from Washington bridge near India Point) have been returned by the city treasurer and receipted for, amounting to . . . $2 00

CONTINGENCIES.

Bills approved on account of contingencies from January 1 to March 31, 1894, inclusive, amounted to . . $10,027 90

Charged as follows:

New city yard, Henderson street—to grade and fence	$ 892 89
Bath street—to repair	1,611 68
Jewett street—to repair	2,944 90
Okie street—to repair	3,835 09
West Park street—to repair	743 34
	$10,027 90

ROBERT E. SMITH,

Commissioner.

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FORTY-SIXTH QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING JUNE 30, 1894.

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REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., July 1, 1894.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the forty-sixth quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and cost of same for the quarter ending June 30, 1894.

WATER WORKS.

May 19th, under authority of Resolution No. 770, approved December 29, 1893, the land known as the Rhodes and Chace farms, situated in the town of Warwick, was sold to People's Trust Company, reserving the low land adjoining the river; and also a street sixty feet wide, extending to the Apponaug road.

May 7th, the offer of John R. White & Son to furnish and deliver at Hope Pumping Station the following coal was accepted, viz.:

300 tons Anthracite coal, egg size;
225 tons Anthracite coal, stove size.

Amount, $2,497.50.

The average daily consumption of water during the last quarter was 9,992,892 gallons.

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Water pipes were laid during the quarter, as follows:

8-INCH.

In Carleton and Meeting streets, and in Cranston and Woodbine streets, Town of Cranston	4,245.94 feet.

6-INCH.

In Amherst, Arcade, Battey, Boyd, Brook, Canton, Cedar, Creighton, Dixon, Elton, Florence, Frankfort, Gratis, Hudson, Larch, Mitchell, Nursery, Public, Rill, Rutland, Sawyer, Senter, Ship, Smith, South, Stanwood, Wayne, Wilcox, Winslow and Wood streets, Adelphi, Chapin, Duncan, Homestead, Huntington, Indiana, Morris and Pleasant View avenues; Ware court and Roger Williams park; in Barrows and Princeton streets, Town of Johnston; and in Clarendon and Orchard streets, Arnold, Bay View, Doric and Wheeler avenues, Town of Cranston	13,988.42 feet.
Total	18,234.36 feet.

or 3.453 + miles.

Water pipes were removed during the quarter, as follows:

6-INCH.

In Wood street, Chapin and Huntington avenues	693.11 feet.

or .131 + miles.

Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.00 feet.
30-inch	59,893.04 feet.
24-inch	43,553.03 feet.
20-inch	9,626.59 feet.
16-inch	33,243.82 feet.
12-inch	77,754.09 feet.
10-inch	14,652.26 feet.
8-inch	229,603.95 feet.
6-inch	979,929.61 feet.
Total	1,458,340.39 feet,

or 276.201 — miles.

Thirty-three fire hydrants have been set during the quarter, one in each of the following locations:

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Adelphi avenue, north side, 208 feet east of Taber avenue.
Alabama avenue, northeast corner of Virginia avenue.
Brook street, west side, 7 feet north of Meeting street.
California avenue, northwest corner of Virginia avenue.
Congress avenue, southwest corner of Niagara street.
East George street, north side, 263 feet west of Gano street.
Eddy street, east side, 116 feet north of Ohio avenue.
Fountain street, south side, opposite east line of Calender street.
Friendship street, northeast corner of Eddy street.
Huntington avenue, northeast corner of Noyes avenue.
Huntington avenue, east side, 80 feet north of Althea street.
Huntington avenue, northeast corner of Chapin avenue.
Indiana avenue, north side, about 400 feet east of Virginia avenue.
Laurel Hill avenue, Johnston, northeast corner of Cleveland street.
Massachusetts avenue, north side, 228 feet east of Broad street.
Massachusetts avenue, north side, 230 feet west of Virginia avenue.
Massie avenue, southeast corner of Broad street.
Morris avenue, east side, northeast corner of Woodbury street.
Ohio avenue, north side, 135 feet east of Maryland avenue.
Ohio avenue, north side, 553 feet east of Maryland avenue.
Ohio avenue, north side, 195 feet west of Virginia avenue.
Oxford street, north side, opposite east line of Plum street.
Pine street, north side, 13 feet northeast of Dorrance street.
Pine street, north side, 124 feet west of Eddy street.
Pleasant View avenue, east side, about 140 feet north of Lowe avenue.
Rutland street, north side, 136 feet east of Bucklin street.
Senter street, northwest corner of Okie street.
Ship street, northeast corner of Dyer street.
South street, south side, about 400 east of Eddy street.
Vermont avenue, north side, 213 feet west of Maryland avenue.
Washington avenue, north side, 425 feet east of Eddy street.
Washington avenue, northwest corner of Maryland avenue.
Wheaton avenue, northwest corner of Huntington avenue.

The total number of fire hydrants is now sixteen hundred and fourteen: fifteen hundred and sixty flush and fifty-four post hydrants.

During the quarter two hundred and fifty-nine water meters were set, of which number six were to replace other meters. The use of four meters was discontinued.

The following water meters were in use at the close of the quarter:

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Kind.	Size.								Total.
	⅝-in.	¾-in.	1-in.	1½-in.	2-in.	3-in.	4-in.	6-in.	
Ball & Fitts, piston	3,064	611	146	33	6	.....	.....	.....	3,860
Ball & Fitts, rotary	.....	.....	22	20	2	4	2	.....	50
Crown	5,849	650	173	77	25	11	10	.....	6,804
Fales, Jenks & Sons	.....	.....	1	.....	.....	.....	.....	.....	1
Neptune	28	.....	.....	.....	.....	.....	.....	.....	28
Thomson	1,545	242	52	40	15	4	4	4	1,906
Worthington	4	1	.....	.....	1	.....	1	.....	7
	10,490	1,513	394	170	49	19	17	4	12,656

Thirteen plumbers' licenses have been issued during the quarter, making the total number one hundred and three, all of which expire December 31, 1894.

Eleven hundred and fifty-five permits to do plumbing work were issued during the quarter.

Two hundred and eighty-four applications for water were made during the quarter, making the total number June 30, 1894, nineteen thousand seven hundred and thirty-nine.

The number of new service stops opened during the quarter was two hundred and sixty-two.

The total number of service stops opened to June 30, 1894, inclusive, was eighteen thousand, nine hundred and ninety-five. The number in actual use June 30, 1894, was seventeen thousand seven hundred and forty-one.

The amount of bills approved on account of water works from April 1 to June 30, 1894, inclusive, was:

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For construction and extension, . . $30,889 73

Classified as follows:

Worthington high duty pumping engine	$14,011 00	
Cast iron water pipe	7,425 89	
Laying water pipe	4,449 11	
Office building at new city yard	1,423 90	
Laying service pipe	1,176 38	
Labor on and carting pipe	512 10	
Special castings	338 67	
Removing and refitting barn at new city yard	307 77	
Rent of wharf and pipe yard	299 20	
Wharf salaries	195 00	
Fire hydrants, boxes and covers	158 84	
Barn expenses	154 92	
Taps and stops	134 75	
Tools	113 00	
Horses, wagons, harnesses, etc	66 70	
Watchman at city wharf	57 50	
Experimental tests of water filtration	15 00	
		$30,889 73

For maintenance, ... $25,047 85

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$3,614 15	
Engineers	894 75	
Firemen	759 90	
Sundries	611 74	
Superintendence	299 00	
Labor on fuel	105 60	
Oil, waste and packing	98 36	
Care of grounds	59 55	
Barn expenses	40 02	
Corliss pumping engine and house	32 18	
Lights	29 90	
Real estate	20 07	
Worthington pumping engine	12 23	
Cornish engine house	6 60	
		$6,584 05

SOCKANOSSET RESERVOIR.

Watchman	$182 00	
Sundries	163 25	
		345 25
Amount carried forward		$6,929 30

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Amount brought forward		$6,929 30

Hope Pumping Station.

Coal and wood	$2,497 50	
Engineers	575 25	
Firemen	420 60	
Care of grounds	134 75	
Lights	85 56	
Hope pumping engine, No. 1	72 53	
Sundries	71 63	
Oil, waste and packing	50 59	
Hope pumping engine, No. 2	29 50	
		3,937 91

Hope Reservoir.

Sundries	$271 34	
Watchman	204 75	
		476 09

Fruit Hill Reservoir.

Sundries	$457 52	
Watchman	189 00	
		646 52

Pipe Line and Service Stops.

Repairs	$1,963 75	
Superintendence—salaries	863 25	
		2,827 00

Meter Department.

Water meters	$5,196 65	
Setting and repairing meters	1,305 97	
		6,502 62

Miscellaneous.

Clerks' and inspectors' salaries	$2,760 91	
Prevention of defilement of the Pawtuxet	426 62	
Barn expenses	175 31	
Horses, wagons, harnesses, etc	158 67	
Analyses of water	90 00	
Sundries	64 10	
Real estate at Pawtuxet	28 96	
Pipe yard, office expenses	13 34	
Public drinking fountains and troughs	10 50	
		3,729 41
		$25,047 85

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The amount of expenditures from April 1 to June 30, 1894, inclusive, was . . $55,937 58

The total expenditures to June 30, 1894, inclusive, were $7,930,303 67

The *net* expenditure for construction and extension from April 1 to June 30, 1894, inclusive, was..... $30,310 12

The *net* expenditure for construction and extension to June 30, 1894, inclusive, was..... $6,028,176 57

The *net* expenditure for maintenance from April 1 to June 30, 1894, inclusive, was..... $17,398 50

The *net* expenditure for maintenance to June 30, 1894, inclusive, was..... $1,188,781 55

Bills deposited with the city treasurer for collection, from April 1 to June 30, 1894, inclusive, amounted to $55,148 18

As follows:

Water.....	$46,380 97
Water meters.....	5,602 50
Setting and repairing meters.....	2,201 25
Rent of real estate.....	177 00
Permanently closing service stops.....	55 00
Penalties.....	36 00
Examination and repairs of pipe line.....	19 50
Old lawn mower.....	1 00
Labor and material, laying service pipes, etc.....	526 38
Lead dross.....	75 39
Cast iron water pipe.....	73 19
	$55,148 18

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $57,814 68

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As follows:

Water	$49,586 57
Water meters	5,517 50
Setting and repairing meters	1,855 35
Rent of real estate	204 00
Permanently closing service stops	55 00
Penalties	38 00
Examination and repairs of pipe line	16 50
Old lawn mower	1 00
Labor and material—laying service pipes, etc	354 62
Cast iron water pipe	110 75
Lead dross	75 39
	$57,814 68

SEWERS.

During the quarter ending June 30, 1894, five hundred and eighty-one permits were issued to drain layers: four hundred and forty-one for new work and one hundred and forty for extension and repairs of drains.

Four drain layers' licenses were issued during the quarter, making the total number fifty-one, all of which expire December 31, 1894.

April 27th, the offer of John W. Mathewson & Son to furnish granite inlet stones was accepted. Amount, $550.

May 28th, the offer of Manchester & Hudson to furnish and deliver in this city the following sewer material was accepted, viz.:

6,000 lineal feet, 8-inch straight pipe;
350 pieces 8-inch by 6-inch branch pipe;
20 pieces 8-inch by 8-inch branch pipe.

June 7th, the proposal of J. Frank Read & Co. to lay sewer connections from sewer to inside the curb line of Pine street, from Beacon avenue to Broad street, was accepted.

During the quarter assessments for the cost of constructing sewers were certified to the city treasurer, as follows:

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Camp street	$2,556 29
Aleppo street	2,879 11
Cedar street	473 43
East avenue	3,420 18
Sabin street	1,984 44
Hope street	1,727 83
Bowen street	559 11
Williams, Fremont, East Transit and Preston streets	6,403 75
Mathewson street	585 32
Jillson and Eddy streets	6,929 34
Valley street	8,233 02
Robin street, Regent avenue and Cornell street	3,016 69
Allston street and Regent avenue	826 11
Regent avenue and Allston street	1,659 90
Oak, Willow, Hudson, Wood, Messer and Ellery streets and Chapin avenue	19,872 15
Superior and Wendell streets	3,142 32
Potter's avenue and Laura street	7,690 94
Duncan avenue	2,193 21
Olney street	861 30
Wilson street	374 35
Logan avenue	811 39
Section 7, Bartlett street	172 80
Total	$76,372 98

June 4th, contracts for the construction of the following sewers, which were subsequently executed, were awarded as follows, namely:

[The amounts given below are what are estimated will be paid the contractors for labor, and do not include the cost of inspection and materials, or rock excavation.]

To William H. Sherman.

No. of resolution.	Date of approval.		
281.	May 18, 1894,	*Burnett street, Adelaide avenue and Broad street,* . . .	$1,134 92
282.	" " "	*Jackson avenue, from Potter's to Huntington,*	335 30
284.	" " "	*Prairie avenue, from Pavilion to Logan,* .	460 89

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No. of resolution.	Date of approval.				
286.	May	18,	1894,	*Staniford street, from Bogman to Blackstone,*	$508 27
287.	"	"	"	*Whitmarsh and Broad streets,*	602 37

To George R. Newman & Co.

No. of resolution.	Date of approval.				
283.	May	18,	1894,	*Perry and Howard streets,*	$404 75
285.	"	"	"	*South Angell and East River streets,* .	2,623 85
289.	"	"	"	*Union avenue, from Messer street to Huntington avenue,* . .	1,662 11

To Timothy F. Lyons.

No. of resolution.	Date of approval.				
288.	May	18,	1894,	*Evergreen and Forest streets,*	$37 77

June 28th, a contract for the construction of the following sewer, which was subsequently executed, was awarded as follows, namely:

To Frederick E. Shaw.

No. of resolution.	Date of approval.				
381.	June	22,	1894,	*Atlantic avenue, from Elmwood to Hamilton street,*	$1,113 05

During the quarter the construction of the following sewers was completed, namely:

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No. of resolution.	Date of approval.				Date of completion.
372.	June	16,	1893,	*Wickenden, South Main and Crawford streets,* . .	April 19, 1894.
546.	Sept.	23,	"	*Jewett and Senter streets,*	June 7, 1894.
599.	Oct.	20,	"	*Alma street, from Candace to Pekin,*	June 25, 1894.
602.	"	"	"	*Public street, from Prairie avenue to Ocean street,* . .	April 14, 1894.
697.	Dec.	2,	"	*Harris avenue, from Broadway to Grove street,*	June 13, 1894.
698.	"	"	"	*Logan avenue, from Plain street to Ocean,*	April 20, 1894.
52.	Jan.	19,	1894,	*Canton and Bergen streets,*	June 25, 1894.
54.	"	"	"	*Douglas avenue, from Whipple street to Orms,* . . .	May 8, 1894.
55.	"	"	"	*Elmwood avenue and Roger Williams park,* . .	June 12, 1894.
56.	"	"	"	*Olney street, from Brenton avenue easterly,*	April 14, 1894.
57.	"	"	"	*Oriole avenue, Elton street and Adelphi avenue,* . .	May 8, 1894.
58.	"	"	"	*Potter's avenue, Sherburne and Swan streets,* . .	April 16, 1894.
59.	"	"	"	*Wilson street, from Harrison to Dexter,*	April 23, 1894.

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No. of resolution.	Date of approval.				Date of completion.
92.	Feb.	16,	1894,	*Atlantic avenue, from Broad street to Hamilton,* . .	June 22, 1894.
93.	"	"	"	*East Manning st., from Gano to Wayland avenue,* . .	May 15, 1894.
282.	May	18,	"	*Jackson avenue, from Potter's to Huntington,* . .	June 30, 1894.
287.	"	"	"	*Whitmarsh and Broad streets,* . .	June 25, 1894.

At the close of the quarter work upon the following sewers of the improved sewerage system was in progress, namely:

No. of resolution.	Date of approval.			
138.	Mar.	21,	1893,	*Norfolk and Station streets, Huntington avenue, Chambers and Burrington streets.*
564.	Sept.	23,	"	*Section* 10, *Allen's avenue Division.*
564.	"	"	"	*Section* 11, *Allen's avenue Division.*
564.	"	"	"	*Section* 12, *Allen's avenue Division.*
564.	"	"	"	*Section* 13, *Woonasquatucket river Division.*
564.	"	"	"	*Section* 14, *Woonasquatucket river Division.*

Work upon the following lateral sewers was in progress at the close of the quarter, namely:

No. of resolution.	Date of approval.			
603.	Oct.	20,	1893,	*Wayne street, from Douglas avenue to Candace street.*
288.	May	18,	1894,	*Evergreen and Forest streets.*
289.	"	"	"	*Union avenue, from Messer street to Huntington avenue.*

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Work upon the following sewers, completing the work ordered by the city council, had not commenced June 30, 1894, namely:

No. of resolution.	Date of approval.	
700.	Dec. 2, 1893,	*Westfield street, from Elmwood avenue to Harrison street.*
51.	Jan. 19, 1894,	*Academy avenue, from Beaufort street to Dover, and from Regent avenue to Cambridge street.*
281.	May 18, "	*Burnett street, Atlantic avenue and Broad street.*
283.	" " "	*Perry and Howard streets.*
284.	" " "	*Prairie avenue, from Pavilion to Logan.*
285.	" " "	*South Angell and East River streets.*
286.	" " "	*Staniford street, from Bogman to Blackstone.*
381.	June 22, "	*Atlantic avenue, from Elmwood to Hamilton street.*
382.	" " "	*Salisbury street, from Plain street about 300 feet westerly.*

The amount of bills approved on account of sewers from April 1 to June 30, 1894, inclusive, was:

FOR CONSTRUCTION.

Regular appropriation	$59,014 72	
Improved sewerage appropriation	135,869 90	
		$194,884 62

Charged as follows:

Materials	$31,133 17
Contract reservations	11,827 00
Salaries of assistant engineers	2,692 50
Clerks' salaries	959 00
Additional catch-basins	804 02
Sundries—improved sewerage system	717 14
Amount carried forward	$48,132 83

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Amount brought forward	$48,132 83
Testing cement	357 29
Sundries	247 34
Laying drains to curbstone	227 31
Watchman at city wharf	70 00
Tools	33 36
Sewer in Alma street, from Candace to Pekin	392 31
Sewer in Atlantic avenue, from Broad street to Hamilton	1,123 29
Sewer in Camp, North and North Main streets	28 00
Sewer in Canton and Bergen streets	2,250 32
Sewer in Douglas avenue, from Whipple street to Orms	1,931 85
Sewer in East Manning street, from Gano to Wayland avenue	751 04
Sewer in Elmwood avenue and Roger Williams park	14,120 52
Sewer in Evergreen and Forest streets	2,205 09
Sewer in Harris avenue, from Broadway to Grove street	2,380 93
Sewer in Jackson avenue, from Potter's to Huntington	321 07
Sewer in Jewett and Senter streets	4,202 80
Sewer in Logan avenue, from Plain street to Ocean	290 97
Sewer in Olney street, from Brenton avenue easterly	688 03
Sewer in Oriole avenue, Elton street and Adelphi avenue	1,991 46
Sewer in Potter's avenue, Sherburne and Swan streets	2,038 42
Sewer in Public street, from Prairie avenue to Ocean street	599 45
Sewer in Union avenue, from Messer street to Huntington avenue	687 70
Sewer in Wayne street, from Douglas avenue to Candace street	545 50
Sewer in Whitmarsh and Broad streets	635 43
Sewer in Wickenden, South Main and Crawford streets	782 09
Sewer in Wilson street, from Harrison to Dexter	214 84
Sewer in Allen's avenue Division, Section 10	3,869 25
Sewer in Allen's avenue Division, Section 11	20,323 51
Sewer in Allen's avenue Division, Section 12	57,634 31
Sewer in Dorrance street, from Cove to Dyer	612 78
Sewer in Norfolk and Station streets	4,985 58
Sewer in Woonasquatucket river Division, Section 13	700 00
Sewer in Woonasquatucket river Division, Section 14	13,306 55
Grading Norfolk street, from Oak to Cranston	6,203 40
	$194,884 62

For maintenance $6,446 38

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Charged as follows:

Cleaning basins and sewers	$2,068 05
Repairing basins and sewers	1,496 86
Inspection of connections	792 16
Cleaning and repairing old drains	558 33
Tools	499 89
Salary—superintendent	390 00
Horses, wagons, harnesses, etc	299 57
Barn expenses	256 60
Cleaning private connections	43 20
Sundries	31 72
Filling cisterns, etc	10 00
	$6,446 38

The *net* expenditure for construction of sewers to June 30, 1894, inclusive, was $4,717,026 85

The *net* expenditure for maintenance of sewers to June 30, 1894, inclusive, was 417,407 20

Bills deposited with the city treasurer for collection from April 1 to June 30, 1894, inclusive, amounted to $193 19

As follows:

Cleaning private connections	$65 50
Use of engine	34 00
Filling cisterns, etc	20 25
Cleaning sewers	14 40
Labor sinking artesian wells	12 15
Old water gate frame	1 75
Sewer material	28 89
Laying drains to curbstone	16 25
	$193 19

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $193 19

As follows:

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Cleaning private connections	$65 50
Use of engine	34 00
Filling cisterns, etc	20 25
Cleaning sewers	14 40
Labor sinking artesian wells	12 15
Old gate water gate frame	1 75
Sewer material	28 80
Laying drains to curbstone	16 25
	$193 19

HIGHWAYS.

Forty-two permits to open streets were issued during the quarter.

April 9th, the proposal of J. William Moore to furnish such concrete work as may be required for the year 1894 was accepted and a contract subsequently executed.

Statements have been prepared of the cost of curbstones set, ascertained by the commissioner and certified to the board of aldermen for approval, as follows:

Duncan avenue, from North Main street to Knowles	$1,309 59
Laura street, from Broad to Hamilton	914 44
North street (now Rochambeau avenue), from North Main street to Swan Point road	6,431 96
Pavilion avenue, from Prairie to Eddy street	2,341 17
Total	$10,997 16

During the quarter statements of the cost of concreting sidewalks, with the ten per centum added to cover the cost of assessing and collecting, were certified to the assessors of taxes, viz.:

Elmwood avenue, from Bridgham street to Lexington avenue	$368 34
Earl street, from Elmwood avenue to its westerly termination	47 00
Wesleyan avenue, from Elmwood avenue to Broad street	265 27
North Main street, west side, from Steeple to Elizabeth	30 36
Barnes street, from Prospect to Thayer	51 85
Pleasant street, from North Main to Camp	77 91
Camp street, from Olney to Doyle avenue	308 48
Congdon street, from Jenckes to Halsey	55 54
Westminster street, from Jackson to Greene	28 29
Total	$1,173 64

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During the quarter the following work was completed:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
June 15, 1893,	*North street, from North Main to Swan Point road.*
Sept. 21, "	*Balch street, from Pacific avenue to Jackson.*
" " "	*Grove street, from Harris avenue to Valley street.*
" " "	*Hamburg avenue, from Burrington street to Pacific avenue.*
" " "	*Langdon street, from Sherman to Hagan.*
" " "	*Pacific avenue, from Hamburg to Balch street.*
" " "	*River street, from Grove to the Woonasquatucket river.*
" " "	*Congdon street, from Halsey to the north side of Hidden.*
Oct. 19, "	*Arnold street, from Hope to Brook.*
" " "	*Duncan avenue, from North Main street to Knowles.*
" " "	*Adelphi avenue, from Elmgrove to Wayland.*
" " "	*Blackstone street, from Friendship to Prairie avenue.*
" " "	*Quaid street, from bend in said street to Hawes street.*
" " "	*Superior street, from Cranston to Wendell.*
" " "	*Wendell street, from Cranston to Messer.*
" " "	*Inkerman street, from Candace to Pekin.*
" " "	*Hawes street, from Charles to Black.*
Nov. 16, "	*Pavilion avenue, from Prairie to Eddy street.*
" " "	*Pearl street, from Prairie avenue to Beacon.*

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Date of order.	
Nov. 16, 1893,	*Congress avenue, from Melrose street to Elmwood avenue.*
" " "	*Laura street, from Broad to Hamilton.*
Dec. 21, "	*Camp street, from Evergreen to Rochambeau avenue.*
" " "	*Carleton street, from Beaufort to Chalkstone avenue.*
" " "	*Cedar street, from Brayton avenue to Acorn street.*
" " "	*Elton street, from Elmgrove avenue to Wayland.*
" " "	*Carrington avenue, from Camp street to East avenue.*
" " "	*Dale street, from Atwell's avenue to West Exchange street.*
" " "	*Redwing street, from Elmwood avenue to the land of the N. Y., N. H. & H. R. R. Co.*
Feb. 15, 1894,	*Rochambeau avenue, from Olney street to Blackstone boulevard.*
" " "	*Helme street, from Harris avenue to Valley street.*
" " "	*Winslow street, from Weybosset to Broad.*
Apr. 19, 1894,	*Tremont street, from Charles to Ashburton.*
May 17, "	*America street, from Africa to Atwell's avenue.*
" " "	*Huntington avenue, from McDonough street to Union avenue.*
" " "	*Preston street, from Ives to Gano.*

To Construct Channel for Storm Water.

No. of resolution.	Date of approval.	
331.	June 6, 1893,	*Vale street, across Danforth street on to the land owned by the city.*

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To Grade and Put in Good Condition.

No. of resolution.	Date of approval.			
693.	Dec.	2,	1893,	*Promenade street, from Holden to Hemlock.*

To Grade.

49.	Jan.	19,	1894,	*Huntington avenue, from Cranston street to Chambers.*

To Repair.

77.	Feb.	2,	1894,	*Bath street.*
78.	"	"	"	*Jewett street.*
79.	"	"	"	*Okie street.*
80.	"	"	"	*West Park street.*

To be Paved with Granite Blocks.

265.	May	17,	1893,	*South Main street, from Planet to James.*
631.	Nov.	3,	"	*Jackson street, from Westminster to Carpenter.*
182.	Mar.	30,	1894,	*Olney street, from end of present pavement to Camp.*

To Curb.

692.	Dec.	2,	1893,	*Goddard street, adjoining Candace street school estate.*

To Concrete Sidewalks.

210.	April	6,	1894,	*Common street, from Carroll to Mulberry.*
257.	May	5,	"	*North Main street, west side, from Steeple to Elizabeth.*
257.	"	"	"	*Earl street, from Greenwich to its westerly termination.*

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No. of resolution.	Date of approval.	
257.	May 5, 1894,	*Greenwich street, from Bridgham to Lexington avenue.*
257.	" " "	*Fountain street, from Jackson to Carpenter.*
257.	" " "	*Barnes street, from Prospect to Thayer.*
257.	" " "	*Wesleyan avenue, from Elmwood to Broad street.*
257.	" " "	*Camp street, from Olney to Doyle avenue.*
257.	" " "	*Pleasant street, from North Main to Camp.*
257.	" " "	*Congdon street, from Jenckes to Halsey.*
257.	" " "	*Westminster street, from Greene to Jackson.*

To Take Possession and Remove Obstructions.

Date of order.	
May 17, 1894.	*Tremont street, from Charles to Ashburton.*

The following work was in progress June 30, 1894, viz.:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
Oct. 19, 1893.	*Admiral street, from Whipple to Mowry:*—in process.
Nov. 16, "	*Swan street, from Plain to Eddy:*—curbing set.
Dec. 21, "	*Jewett street, from Senter to its westerly termination:*—in process.
" " "	*Senter street, from Smith to West Park:*—nearly completed.
May 17, 1894.	*Huntington avenue, from Cranston street to Jackson avenue:*—in process.

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Date of order.	
May 17, 1894,	*Mitchell street, from Broad to Melrose :*—in process.

TO TAKE POSSESSION, GRADE AND PUT IN GOOD CONDITION.

Sept. 7, 1893,	*Harris avenue, from Acorn street to Kinsley avenue :*—in process.

TO GRADE.

No. of resolution.	Date of approval.	
50.	Jan. 19, 1894,	*Norfolk street, from Oak to Cranston :*—in process.

TO WIDEN ROADWAY.

629.	Nov. 3, 1893,	*Clemence street, from Westminster to Washington :*—in process.

TO PAVE WITH BRICK OR TRINIDAD ASPHALT.

181.	Mch. 30, 1894,	*Clemence street, from Westminster to Washington :*—in process.

TO GRADE AND PUT IN CONDITION.

76.	Feb. 2, 1894,	*Blackstone boulevard, from Rochambeau avenue to East :*—in process.
355.	June 12, "	*Eddy street, from Pavilion avenue to the Railroad bridge :*—in process.

The following work, ordered by the board of aldermen and city council, had not commenced June 30, 1894, viz. :

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
Dec. 21, 1893,	*Canton street, from Regent avenue to Chalkstone.*

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Date of order.	
Dec. 21, 1893,	*Bergen street, from Regent avenue to Chalkstone.*
May 17, 1894,	*Union avenue, from Messer street to the city line.*
June 21, "	*Adelphi avenue, from Taber to Elmgrove.*
" " "	*Oriole avenue, from Butler to Grand.*
" " "	*Howard street, from Westminster to Broadway.*
" " "	*Melrose street, from Adelaide avenue to Irving street.*
" " "	*Rutland street, from Elmwood avenue to Bucklin street.*

TO TAKE POSSESSION AND REMOVE OBSTRUCTIONS.

May 17, 1894,	*Waterman street, from Benefit street about 200 feet southeasterly.*
June 21, "	*Williams street, from South Main to Hope.*

TO BE PAVED WITH GRANITE BLOCKS.

No. of resolution.	Date of approval.	
760.	Dec. 22, 1893,	*East street, from Tockwotton to Wickenden; and Wickenden street, from the west side of Hope street to the east side of East street.*

TO BE PAVED WITH GRANITE BLOCKS, AND CURBED.

780.	Dec. 3, 1892,	*Gaspee street, from Cove to Promenade.*

TO PAVE WITH BRICK OR TRINIDAD ASPHALT.

183.	Mch. 30, 1894,	*Pine street, from Beacon avenue to Broad street.*

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Bills approved on account of highways from April 1 to June 30, 1894, inclusive, amounted to:

Regular appropriation	$36,392 69	
Special appropriation	62,508 29	
Special credit appropriation	16,367 99	
		$115,268 97

Classified as follows:

Cleaning streets	$15,265 06	
Repairs on unpaved streets	6,890 00	
Barn expenses	2,662 92	
Blacksmith and wheelwright shop	1,915 64	
Crushed stone—material and labor	1,767 83	
Repairs on paved streets	1,527 84	
Steam rollers—repairs and supplies	1,511 48	
Tools, implements, etc	1,069 37	
Horses, wagons, harnesses, etc	834 37	
Salaries—superintendent and clerks	741 00	
Building driveways, etc	535 83	
Labor on materials	335 54	
Sundries	233 56	
Watchman at city yard	204 75	
Repairs on stone crushers	157 81	
Watering streets	133 49	
Watchman at city wharf	56 00	
Removing snow and ice	53 00	
Repairing sidewalks and driveways opposite public buildings	43 85	
Fencing streets—material and labor	18 63	
Office expenses—city yard	14 32	
		35,972 29

New Work—Building and Rebuilding Streets, Etc.

Sidewalks Curbed and Gutters Paved.

Adelphi avenue, from Elmgrove to Wayland	$357 92	
Admiral street, from Whipple to Mowry	2,573 81	
America street, from Africa to Atwell's avenue	369 46	
Arnold street, from Hope to Brook	1,548 20	
Balch street, from Pacific avenue to Jackson	286 38	
Bergen street, from Regent avenue to Chalkstone	71 46	
Blackstone street, from Friendship to Prairie avenue	393 60	
		5,600 83
Amount carried forward		$41,573 12

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Amount brought forward		$41,573 12
Camp street, from Evergreen to Rochambeau avenue	$2,042 59	
Carleton street, from Beaufort to Chalkstone avenue	2,537 49	
Carrington avenue, from Camp street to East avenue	2,883 01	
Cedar street, from Brayton avenue to Acorn street	2,216 03	
Congdon street, from Halsey to north side of Hidden	1,006 70	
Congress avenue, from Melrose street to Elmwood avenue	1,439 86	
Dale street, from Atwell's avenue to West Exchange street	543 40	
Dorrance avenue, from North Main street to Knowles	3,136 05	
Eddy street, from Pavilion avenue to railroad bridge	293 43	
Elba street, from Elmgrove avenue to Wayland	852 53	
Grove street, from Harris avenue to Valley street	223 49	
Hawthorn avenue, from Burrington street to Pacific avenue	299 7[illegible]	
Hayes street, from Charles to Black	414 43	
Helme street, from Harris avenue to Valley street	1,305 44	
Huntington avenue, from Cranston street to Jackson avenue	708 32	
Huntington avenue, from McDonough street to Union avenue	3,737 81	
Ickenham street, from Candace to Pekin	263 25	
Jewett street, from Senter to its westerly termination	[illegible]	
[illegible] street, from Sherman to Hagan	1,84[illegible]	
[illegible] street, from Dexter to Hawthorn	1,77[illegible]	
Mt. Hope street, from Broadway to Melrose	1,294 14	
N[illegible] street, from N[illegible] to Mayor[illegible] Swan Point road	3,447 [illegible]	
[illegible] street, from Hay[illegible] street to Bab[illegible] street	[illegible]	
P[illegible] street, from Prospect to Eddy street	1,8[illegible]	
[illegible] street, from Pro[illegible] avenue to Beaufort street	2[illegible] 12	
P[illegible] street, from Lower [illegible]	9[illegible]	
Q[illegible] street, from [illegible] street to Hayes	[illegible]	
[illegible] street, from [illegible] avenue to land of [illegible] N. Y., N. H. & H. R. R. Co.	847 [illegible]	
[illegible] street, from [illegible] to West Market street	2[illegible]	
S[illegible] street, from [illegible] to West Park	7[illegible]	
S[illegible] street, from [illegible] to Wenlock	1[illegible]	
S[illegible] street, from [illegible] to Eddy	7[illegible]	
[illegible] street, from [illegible] to Ashton	4[illegible]	
W[illegible] street, from [illegible] to Messer	[illegible]	
W[illegible] street, from [illegible] to [illegible]	7[illegible]	
		[illegible]
Amount [illegible]		$8[illegible]

Amount brought forward		$85,137 01
Pave with Granite Blocks.		
Charles street, from Randall square to near Ashburton street	$1,169 44	
Jackson street from Westminster to Carpenter	5,496 09	
Olney street, from present end of pavement to Camp	1,397 20	
South Main street, from Planet to James	1,492 90	
		9,555 63
Pave with Brick or Trinidad Asphalt.		
Clemence street, from Westminster to Washington.		245 43
To be Brought to Grade.		
Huntington avenue, from Cranston street to Chambers	$5,857 05	
Melrose street, from Adelaide avenue to Roger Williams	613 60	
		6,470 65
To Grade and Build.		
Blackstone boulevard, from Rochambeau avenue to East		6,943 69
Grade and Put in Good Condition.		
Academy avenue, from Chalkstone to Smith street.	$258 04	
Promenade street, from Holden to Hemlock	6,200 12	
		6,458 16
Take Possession, Grade and Put in Good Condition.		
Harris avenue, from Acorn street to Kinsley avenue		178 50
Construct Channel for Storm Water.		
Vale street, across Danforth on to the land owned by the city		241 90
Build Storm Sewer.		
Through land of Riverside Mills, from Aleppo street to the Woonasquatucket river		38 00
		$115,268 97

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Amount brought for
Camp street, from Eve
nue.....
Carleton street, from B
nue.....
Carrington avenue, from
nue.....
Cedar street, from Brayt
Congdon street, from Ha
den.....
Congress avenue, from
avenue.....
Dale street, from Atwell's
street.....
Duncan avenue, from Nor
Eddy street, from Pavi
bridge.....
Elton street, from Elmgr
Grove street, from Harris
Hamburg avenue, from B
avenue.....
Hawes street, from Charl
Helme street, from Harri
Huntington avenue, from
son avenue.....
Huntington avenue, fro
Union avenue.....
Inkerman street, from Ca
Jewett street, from Sente
tion.....
Langdon street, from She
Laura street, from Broad
Mitchell street, from Bro
North street, from North
Pacific avenue, from Ha
Pavilion avenue, from P
Pearl street, from Prairie
Preston street, from Ives
Quaid street, from bend
Redwing street, from El
the N. Y., N. H. and
River street, from Grove
Senter street, from Smith
Superior street, from Cra
Swan street, from Plain
Tremont street, from Cl
Wendell street, from C
Winslow street, from

Amount

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Bills deposited with the city treasurer for collection from April 1 to June 30, 1894, inclusive, amounted to . . $509 56

As follows:

Labor and materials	$211 78
Discharging curbing at city wharf	138 58
Old scrap iron	66 80
Old harnesses	50 00
Street sweepings	32 40
Removing trees	10 00
	$509 56

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $493 76

As follows:

Labor and materials	$249 98
Discharging curbing at city wharf	84 58
Old scrap iron	66 80
Old harnesses	50 00
Street sweepings	32 40
Removing trees	10 00
	$493 76

SIDEWALKS AND CURBING.

The expenditures on account of sidewalks and curbing from April 1 to June 30, 1894, inclusive, amounted to $24,106 40

Charged as follows:

Granite curbing	$22,530 42
Concreting sidewalks	1,400 23
Goddard street, adjoining Candace street school estate	165 75
	$24,106 40

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Curbing bills deposited with the city treasurer for collection from April 1 to June 30, 1894, inclusive, amounted to $11,323 66

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $6,973 84

CITY ENGINEER.

Bills approved on account of the city engineer's department from April 1 to June 30, 1894, inclusive, amounted to $14,189 43

Charged as follows:

Salary—city engineeer	$1,500 00
Salaries of assistants	11,130 75
Salaries of clerks	763 75
Horse car tickets, etc	452 00
Supplies—drawing materials, etc	288 22
Sundries	30 21
Instruments and repairs	24 50
	$14,189 43

Bills deposited with the city treasurer for collection from April 1 to June 30, 1894, inclusive, amounted to $31 53

As follows:

Measuring subways for Providence Telephone Co.	$15 63
Set of sewer diagrams	13 00
Lists of intentions to build	2 00
Tracing paper, etc	90
	$31 53

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $31 53

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As follows:

Measuring subways for Providence Telephone Co.	$15 63
Set of sewer diagrams	13 00
Lists of intentions to build	2 00
Tracing paper, etc	90
	$31 53

BRIDGES.

April 17th, the proposal of Everson & Liddle to construct a masonry arch bridge and retaining walls at Stevens street, over the Moshassuck river, was accepted and a contract subsequently executed. Amount, $9,320.75.

May 8th, the proposal of Nehemiah Kimball, of Bridgeton, R. I., to construct abutments and wing walls for bridge at Charles street, over the West river, was accepted and a contract subsequently executed. Amount, $2,225.

May 22d, the proposal of R. F. Hawkins, of Springfield, Mass., to furnish iron superstructure of Charles street bridge, over the West river, was accepted and a contract subsequently executed. Amount, $1,223.99.

June 20th, the proposal of Daniel F. Grady to furnish concrete work at the Francis street bridge was accepted and a contract subsequently executed. Amount, $3,502.66.

June 28th, the offer of Smithfield Granite Company to furnish and deliver 1,650 square yards block paving for Francis street bridge was accepted.

The following work was in progress at the end of the quarter, namely:

No. of resolution.	Date of approval.	
830.	Dec. 20, 1892.	*Francis street bridge, over Woonasquatucket river.*
48.	Jan. 19, 1894.	*New City Yard, Henderson street:* —to grade and fence.
221.	April 20, "	*Charles street bridge, over the West river.*

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The following work had not commenced June 30, 1894, namely:

No. of resolution.	Date of approval.	
831.	Dec. 20, 1892,	*Oak street foot-bridge, over railroad tracks.*
215.	April 17, 1894,	*Stevens street bridge, over the Moshassuck river.*

Bills approved on account of bridges from April 1 to June 30, 1894, inclusive, amounted to . . $5,989 49

Charged as follows:

Acorn street bridge—to repair	$1 22
Barn expenses	70 09
Central or Red bridge	269 62
Charles street bridge—to rebuild	935 97
Crawford street bridge	47 06
Delaine street bridge	1 23
Eagle street bridge	1 21
Gaspee street bridge	1 27
Horses, wagons, harnesses, etc	130 00
Lumber, hardware, etc	62 84
Park avenue culvert	35 99
Park street bridge	1 45
Point street bridge	1,226 21
Rent of keeper's house, Washington bridge	30 00
Salaries—Central or Red bridge	458 78
Salaries—Point street bridge	983 50
Salaries—Washington bridge	481 11
Stevens street bridge—to rebuild	1 45
Sundries	47 65
Tools	47 99
Valley street bridge—north span	4 90
Valley street bridge—south span	3 67
Veazie street bridge	367 57
Wanskuck bridge	5 18
Washington bridge near India Point	773 53
	$5,989 49

Bills approved from April 1 to June 30, 1894, inclusive, for the construction of the Francis street bridge, have been paid from the appropriation for filling the cove basin, to the amount of . $11,930 10

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Bills deposited with the city treasurer for collection from April 1 to June 30, 1894, inclusive, (for old lumber from various bridges) amounted to $3 50

During the quarter coupons from bills collected have been returned by the city treasurer (for old lumber sold) and receipted for, to the amount of 3 50

CONTINGENCIES.

Bills approved on account of contingencies from April 1 to June 30, 1894, inclusive, amounted to $8,381 02

Charged as follows:

New city yard, Henderson street—to grade and fence	$306 16
Bath street—to repair	1,220 44
Jewett street—to repair	1,911 97
Okie street—to repair	2,653 56
West Park street—to repair	2,288 89
	$8,381 02

ROBERT E. SMITH,

Commissioner.

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FORTY-SEVENTH QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING SEPTEMBER 30, 1894.

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REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., October 1, 1894.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the forty-seventh quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and cost of same for the quarter ending September 30, 1894.

WATER WORKS.

August 18th, the following communication was received, namely:

WARWICK TOWN CLERK'S OFFICE,
APPONAUG, R. I.

"On consideration of the petition of Henry C. Budlong for the town to exempt the City of Providence from taxation of water mains to be placed by said city in the town, it is voted and resolved that the Providence Water Works shall be exempt from taxation for all pipes, hydrants, or implements used for the purpose of laying or repairing or keeping in repair said pipes or hydrants, provided said Providence Water Works shall put in the Pawtuxet water to all persons in said town of Warwick upon the same conditions and upon the same terms as they do in the City of Providence."

WARWICK CLERK'S OFFICE,
APPONAUG, R. I., Aug. 16, 1894.

I certify the foregoing to be a true copy of a vote passed by the Town Council of Warwick at its meeting held Aug. 13, 1894.

Attest:

JAMES T. LOCKWOOD,
Town Clerk.

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July 17th, the offer of Chapman Valve Mfg. Co. to furnish and deliver six 6-inch post hydrants was accepted.

August 28th, the proposals of The Thomas Phillips Co., L. H. Tillinghast & Co., and New England Plumbing Supply Co. to furnish ⅝-inch lead pipe were accepted for 8,000 pounds each.

August 29th, the offer of S. Frank Chase to furnish and set up one Barstow Bay State furnace at office building at pipe yard foot of Henderson street was accepted.

The average daily consumption of water during the quarter was 11,133,567 gallons.

Water pipes were laid during the quarter, as follows:

12-INCH.	
In New Gaspee street	692.82 feet.
10-INCH.	
In New Gaspee street	.87 feet.
8-INCH.	
In Admiral, Francis and Promenade streets, Euclid, Massie and Union avenues; in Hartford avenue, Town of Johnston; and in Cranston, Narragansett and School streets, Dyer and Wayland avenues, Town of Cranston	8,641.65 feet.
6-INCH.	
In Althea, Bartlett, Brook, Conanicut, Cushing, Elswald, Emerson, Faith, Frankfort, Hilton, Irving, Langdon, Manhattan, Melrose, Merchant, Mitchell, Peace, Pratt, Promenade, Ridge, Smith, Spooner, Stanford and Tell streets, Adelphi, Atlantic, Butler, Euclid, Huntington, Massie, Oriole, Reynolds, Stamford and Wheaton avenues, and Dyerville road; in Harrison, Lexington, North and Whitehall streets, Linwood and Webster avenues, Town of Johnston; and in Hillwood street, Dyer, Grand, Linwood, Norton, Roger Williams and Webster avenues, Town of Cranston	13,376.98 feet.
Total	22,712.32 feet.

or 4.302 — miles.

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Water pipes were removed during the quarter, as follows:

In Allens avenue	43.20 feet,

or .008 + miles.

Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.00 feet.
30-inch	59,893.04 feet.
24-inch	43,553.03 feet.
20-inch	9,626.59 feet.
16-inch	33,243.82 feet.
12-inch	78,446.91 feet.
10-inch	14,653.13 feet.
8-inch	238,245.60 feet.
6-inch	993,263.39 feet.
Total	1,481,009.51 feet,

or 280.494 + miles.

Eighteen fire hydrants have been set during the quarter, one in each of the following locations:

Aborn street, west side, opposite Mason street.
Admiral street, north-east side, opposite Chad Brown street.
Burrington street, north-west corner of Jackson avenue.
Calder street, west side, about 422 feet south of Potters avenue.
Chambers street, west side, about 453 feet south of Potters avenue.
Cushing street, north side, about 368 feet west of Thayer street.
Elm street, south-east corner of Eddy street.
Elmwood avenue, north-west corner of Bissell street.
Exchange place, at the northerly corner of McNeal lane.
Hartford avenue, Johnston, south side, opposite Bowlet street.
Hartford avenue, Johnston, south side, opposite Hedley street.
Hartford avenue, Johnston, south-east corner Old Killingly road.
Irving street, north-east corner of Emerson street.
Manhattan street, north side, about 230 feet west of Langdon street.
Sabin street, north side, about 15 feet east of Mathewson street.
Smith street, south-east corner of River avenue.
Stamford avenue, south-east corner of Sawyer street.
Union avenue, north side, about 140 feet east of Linwood avenue.

The total number of fire hydrants is now sixteen hundred and thirty-two: fifteen hundred and seventy-eight flush and fifty-four post hydrants.

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During the quarter two hundred and eighty-two water meters were set, of which number thirty-two were to replace other meters. The use of eleven meters was discontinued.

The following water meters were in use at the close of the quarter:

Kind.	Size.								Total.
	⅝-in.	¾-in.	1-in.	1½-in.	2 in.	3-in.	4-in.	6-in.	
Ball & Fitts, piston	3,064	611	146	33	6	.....	.....	.....	3,860
Ball & Fitts, rotary	.....	.....	22	20	2	3	2	.....	49
Crown	6,011	662	173	79	24	11	10	.....	6,970
Fales, Jenks & Sons	.....	.....	1	.....	.....	.....	.....	.....	1
Thomson	1,602	254	53	42	17	5	4	4	1,981
Trident	28	.....	.....	.....	.....	.....	.....	.....	28
Worthington	3	1	.....	.....	1	.....	1	.....	6
	10,708	1,528	395	174	50	19	17	4	12,895

Three plumbers' licenses have been issued during the quarter, making the total number one hundred and six, all of which expire December 31, 1894.

Nine hundred and ninety-two permits to do plumbing work were issued during the quarter.

Two hundred and ninety applications for water were made during the quarter, making the total number September 30, 1894, twenty thousand and twenty-nine.

The number of new service stops opened during the quarter was three hundred and eight.

The total number of service stops opened to September 30, 1894, inclusive, was nineteen thousand, three hundred and three. The number in actual use September 30, 1894, was eighteen thousand and fifty-seven.

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The amount of bills approved on account of water works from July 1 to September 30, 1894, inclusive, was:

For construction and extension . . $14,130 26

Classified as follows:

Cast iron water pipe	$4,933 28	
Laying water pipe	4,100 94	
Laying service pipe	1,063 31	
Service pipe	1,015 15	
Nagle pumping engine, Hope Station	968 17	
Labor on and carting pipe	607 98	
Fire hydrants, boxes and covers	330 92	
Special castings	248 86	
Wharf salaries	195 00	
Barn expenses	176 93	
Office building at new city yard	167 06	
Experimental tests of water filtration	109 80	
Watchman at city wharf	56 00	
Stop valves	55 32	
Horses, wagons, harnesses, etc	45 65	
Tools	45 49	
Worthington high duty pumping engine	10 00	
Sundries	40	
		$14,130 26

For maintenance $26,862 71

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$4,439 73	
Engineers	952 85	
Sundries	830 00	
Firemen	785 20	
Cornish engine house	665 50	
Superintendence	299 00	
Worthington pumping engine	136 99	
Labor on fuel	124 65	
Oil, waste and packing	97 43	
Lights	68 04	
Care of grounds	58 50	
Barn expenses	38 01	
Corliss pumping engine and house	25 07	
Real estate	23 25	
Cornish pumping engine	12 26	
		$8,556 48
Amount carried forward		$8,556 48

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Amount brought forward		$8,556 48

Sockanosset Reservoir.

Watchman	$182 00	
Sundries	73 74	
		255 74

Hope Pumping Station.

Hope pumping engine, No. 2	$3,525 44	
Engineers	575 25	
Firemen	518 60	
Care of grounds	148 75	
Lights	87 40	
Sundries	68 12	
Oil, waste and packing	66 27	
Hope pumping engine, No. 1	42 55	
		5,032 38

Hope Reservoir.

Sundries	$230 00	
Watchman	204 75	
		434 75

Fruit Hill Reservoir.

Sundries	$708 28	
Watchman	204 75	
		913 03

Pipe Line and Service Stops.

Repairs	$1,822 34	
Superintendence—salaries	868 00	
		2,690 34

Meter Department.

Water meters	$2,977 02	
Setting and repairing meters	1,367 16	
		4,344 18

Miscellaneous.

Clerks' and inspectors' salaries	$2,693 91	
Telephone lines	1,080 00	
Prevention of defilement of the Pawtuxet	430 62	
Sundries	167 93	
Barn expenses	156 78	
Analyses of water	90 00	
Horses, wagons, harnesses, etc.	15 91	
Pipe yard, office expenses	06	
		4,635 81
		$26,882 71

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The amount of expenditures from July 1 to September 30, 1894, inclusive, was . $40,992 97

The total expenditures to September 30, 1894, inclusive, were $7,971,296 64

The *net* expenditure for construction and extension from July 1 to September 30, 1894, inclusive, was..... $13,247 68

The *net* expenditure for construction and extension to September 30, 1894, inclusive, was..... $6,041,424 25

The *net* expenditure for maintenance from July 1 to September 30, 1894, inclusive, was..... $19,997 46

The *net* expenditure for maintenance to September 30, 1894, inclusive, was..... $1,208,779 01

Bills deposited with the city treasurer for collection, from July 1 to September 30, 1894, inclusive, amounted to $57,128 36

As follows:

Water.....	$49,967 17
Water meters.....	4,711 50
Setting and repairing meters.....	1,602 30
Examination and repairs of pipe line.....	54 66
Permanently closing service stops.....	40 00
Penalties.....	40 00
Rent of real estate.....	31 25
Labor and material, laying service pipes, etc.....	658 98
Manure from barn.....	12 00
Discharging cargo of water pipe.....	10 50
	$57,128 36

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $55,720 88

As follows:

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Water	$47,922 65
Water meters	4,780 25
Setting and repairing meters	1,876 60
Rent of real estate	150 50
Penalties	49 00
Permanently closing service stops	49 00
Examination and repairs of pipe line	18 50
Labor and material—laying service pipes, etc.	880 65
Manure from barn	12 00
Discharging cargo of water pipe	10 50
	$55,720 85

The amount of bills approved on account of water works for the fiscal year ending September 30, 1894, inclusive, was:

For construction and extension . . . $134,019 44

Classified as follows:

Worthington high duty pumping engine	$42,031 65
Cast iron water pipe	41,690 24
Laying water pipe	15,294 51
Fire hydrants, boxes and covers	8,543 09
Laying service pipe	4,299 99
Special castings	4,204 22
Stop valves	3,126 93
Labor on and carting pipe	2,114 56
Experimental tests of water filtration	1,911 59
Office building at city yard	1,590 96
Service pipe	1,403 50
Taps and stops	1,240 68
Rent of wharf and pipe yard	1,049 20
Nagle pumping engine at Hope Station	968 17
Wharf salaries	780 00
Barn expenses	695 18
Fruit Hill reservoir, for construction	669 53
Fruit Hill reservoir, for repairs	624 93
Tools	534 03
Horses, wagons, harnesses, etc.	435 04
Sundries	343 67
Removing and refitting barn at new city yard	307 77
Watchman at city wharf	160 00
	$134,019 44

For maintenance $99,997 01

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Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$14,683 34	
Firemen	3,215 30	
Engineers	2,936 60	
Sundries	2,862 31	
Superintendence	1,196 00	
Cornish engine house	763 37	
Labor on fuel	395 25	
Worthington pumping engine	378 46	
Oil, waste and packing	360 96	
Corliss pumping engine and house	334 03	
Lights	190 40	
Barn expenses	155 94	
Care of grounds	138 90	
Real estate	124 17	
Cornish pumping engine	45 11	
		$27,780 14

SOCKANOSSET RESERVOIR.

Watchman	$755 00	
Sundries	371 91	
		1,126 91

HOPE PUMPING STATION.

Hope pumping engine, No. 2	$3,555 84	
Coal and wood	2,511 88	
Engineers	2,301 00	
Firemen	1,857 10	
Lights	429 64	
Care of grounds	371 88	
Sundries	253 57	
Oil, waste and packing	157 08	
Hope pumping engine, No. 1	134 18	
		11,572 17

HOPE RESERVOIR.

Watchman	$819 00	
Sundries	599 83	
		1,418 83

FRUIT HILL RESERVOIR.

Sundries	$2,315 94	
Watchman	799 75	
		3,115 69
Amount carried forward		$45,013 74

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Amount brought forward		$45,013 74

PIPE LINE AND SERVICE STOPS.

Repairs	$8,268 70	
Superintendence—salaries	3,432 25	
		11,700 95

METER DEPARTMENT.

Water meters	$15,946 67	
Setting and repairing meters	6,234 98	
		22,181 65

MISCELLANEOUS.

Clerks' and inspectors' salaries	$11,296 73	
Town of Cranston, tax	4,700 13	
Prevention of defilement of the Pawtuxet	1,741 81	
Telephone lines	1,080 00	
Barn expenses	694 84	
Town of North Providence, tax	400 00	
Analyses of water	367 05	
Sundries	343 35	
Horses, wagons, harnesses, etc	271 04	
Pipe yard, office expenses	76 72	
Real estate at Pawtuxet	63 96	
Public drinking fountains and troughs	44 14	
Town of Lincoln, tax	18 90	
Thawing services	2 00	
		21,100 67
		$99,997 01

SEWERS.

During the quarter ending September 30, 1894, four hundred and eighty-four permits were issued to drain layers: three hundred and fifty-four for new work and one hundred and thirty for extension and repairs of drains.

One drain layer's license was issued during the quarter, making the total number fifty-two, all of which expire December 31, 1894.

July 2d, the offer of James C. Goff to furnish four thousand lineal feet 6-inch sewer pipe was accepted.

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September 10th, the proposal of The Holly Manufacturing Company, of Lockport, N. Y., to furnish and erect three triple-expansion sewage pumping engines with four Babcock and Wilcox boilers, in the Allens avenue sewage pumping station, for the sum of one hundred thousand dollars, was accepted and a contract was subsequently executed.

During the quarter assessments for the cost of constructing sewers were certified to the city treasurer, as follows:

Oriole avenue, Elton street and Adelphi avenue	$2,972 12
Wickenden, South Main and Crawford streets	5,480 92
East Manning street, from Gano to Wayland avenue	1,169 36
Mitchell street, from Broad to Melrose	4,058 56
Public street, from Prairie avenue to Ocean street	2,101 40
Balch street, Pacific avenue and Hamburg avenue	3,364 24
Potters avenue, Sherburne street and Swan street	7,181 28
Douglas avenue, from Whipple street to Orms	3,699 45
Total	$30,027 33

July 5th, a contract for the construction of the following sewer, which was subsequently executed, was awarded as follows, namely:

[The amounts given below are what are estimated will be paid the contractors for labor, and do not include the cost of inspection and materials, or rock excavation.]

To George R. Newman & Co.

No. of resolution.	Date of approval.		
51.	Jan. 19, 1894,	*Academy avenue, from Beaufort street to Dover, and from Regent avenue to Cambridge street,* .	$2,797 53

July 30th, contracts for the construction of the following sewers were awarded and subsequently executed, namely:

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To George R. Newman & Co.

No. of resolution.	Date of approval.				
382.	June	22,	1894,	*Salisbury street, from Plain street westerly,*	$353 70
402.	July	3,	"	*Rutland street, from Elmwood avenue to Bucklin street,* . .	313 83
419.	"	11,	"	*Gesler street, from Courtland to Almy,* .	736 89

To Timothy F. Lyons.

No. of resolution.	Date of approval.				
401.	July	3,	1894,	*Althea street, from Cranston to Dexter.* .	$2,078 66
420.	"	11,	"	*Howard and Perry streets, Broadway, Eden and Bell streets,*	4,935 36
421.	"	"	"	*Meeting street, from Thayer to Brook,* . .	256 61
422.	"	"	"	*Orchard and Fruit streets,*	1,083 55
423.	"	"	"	*Violet street, from Orms street northerly,*	409 34

During the quarter the construction of the following sewers was completed, namely:

No. of resolution.	Date of approval.				Date of completion.
564.	Sept.	23,	1893,	*Section 12, Allens avenue Division,* .	Aug. 11, 1894.
603.	Oct.	20,	1893,	*Wayne street, from Douglas avenue to Candace street.* .	July 19, 1894.

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No. of resolution.	Date of approval.				Date of completion.
700.	Dec.	2,	1893,	*Westfield street, from Elmwood avenue to Harrison street*, ...	July 27, 1894.
51.	Jan.	19,	1894,	*Academy avenue, from Beaufort street to Dover, and from Regent avenue to Cambridge street*, . .	Aug. 25, 1894.
281.	May	18,	"	*Burnett street, Atlantic avenue and Broad street*, . .	July 23, 1894.
283.	"	"	"	*Perry and Howard streets*, . . .	July 26, 1894.
284.	"	"	"	*Prairie avenue, from Pavilion to Logan*, ...	Aug. 4, 1894.
286.	"	"	"	*Staniford street, from Bogman to Blackstone*, . .	Aug. 14, 1894.
288.	"	"	"	*Evergreen and Forest streets*, . .	Aug. 15, 1894.
289.	"	"	"	*Union avenue, from Messer street to Huntington avenue*, ...	July 14, 1894.
381.	June	22,	"	*Atlantic avenue, from Elmwood to Hamilton street*, .	Sept. 8, 1894.
382.	"	"	"	*Salisbury street, from Plain street about 300 feet westerly*, . . .	Sept. 7, 1894.

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No. of resolution.	Date of approval.				Date of completion.
402.	July	3,	1894,	*Rutland street, from Elmwood avenue to Bucklin street*, ...	Sept. 3, 1894.
421.	"	11,	"	*Meeting street, from Thayer to Brook*, ...	Aug. 17, 1894.
423.	"	"	"	*Violet street, from Orms street northerly about 350 feet*, ...	Aug. 22, 1894.

At the close of the quarter work upon the following sewers of the improved sewerage system was in progress, namely:

No. of resolution.	Date of approval.			
138.	Mar.	21,	1893,	*Norfolk and Station streets, Huntington avenue, Chambers and Burrington streets.*
564.	Sept.	23,	"	*Section* 10, *Allens avenue Division.*
564.	"	"	"	*Section* 11, *Allens avenue Division.*
564.	"	"	"	*Section* 13, *Woonasquatucket river Division.*
564.	"	"	"	*Section* 14, *Woonasquatucket river Division.*

Work upon the following lateral sewers was in progress at the close of the quarter, namely:

No. of resolution.	Date of approval.			
285.	May	18,	1894,	*South Angell and East River streets.*
401.	July	3,	"	*Althea street, from Cranston to Dexter.*
420.	"	11,	"	*Howard and Perry streets, Broadway and Eden street.*

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Work upon the following sewers, completing the work ordered by the city council, had not commenced September 30, 1894, namely:

No. of resolution.	Date of approval.	
419.	July 11, 1894,	*Gesler street, from Courtland to Almy.*
422.	" " "	*Orchard and Fruit streets.*
520.	Sept. 25, "	*Medway street, from Gano to near Ives.*
521.	" " "	*Canal and South Water streets, etc., Improved Sewerage System.*

The amount of bills approved on account of sewers from July 1 to September 30, 1894, inclusive, was:

FOR CONSTRUCTION.

Regular appropriation	$36,572 52	
Improved sewerage appropriation	135,796 19	
		$172,368 71

Charged as follows:

Materials	$14,177 37
Contract reservations	7,395 00
Salaries of assistant engineers	2,643 75
Sundries, improved sewerage system	1,376 57
Clerks' salaries	1,058 83
Additional catch-basins	494 31
Testing cement	409 20
Sundries	151 23
Watchman at city wharf	72 00
Tools	21 15
Sewer in Academy avenue, from Beaufort street to Dover and from Regent avenue to Cambridge street	3,538 21
Sewer in Alma street, from Candace to Pekin	100 48
Sewer in Althea street, from Cranston to Dexter	1,719 58
Sewer in Atlantic avenue, from Broad street to Hamilton	336 35
Sewer in Atlantic avenue, from Elmwood to Hamilton street	1,651 31
Amount carried forward	$35,145 34

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Amount brought forward	$35,145 34
Sewer in Burnett street, Adelaide avenue and Broad street	2,023 17
Sewer in Canton and Bergen streets	473 67
Sewer in Evergreen and Forest streets	4,095 31
Sewer in Harris avenue, from Broadway to Grove street	280 28
Sewer in Howard and Perry streets, Broadway, Eden and Bell streets	2,483 51
Sewer in Jackson avenue, from Potters to Huntington	187 78
Sewer in Jewett and Senter streets	60 35
Sewer in Meeting street, from Thayer to Brook	298 74
Sewer in Perry and Howard streets	571 56
Sewer in Prairie avenue, from Pavilion to Logan	853 74
Sewer in Rutland street, from Elmwood avenue to Bucklin street	309 15
Sewer in Salisbury street, from Plain westerly	340 56
Sewer in South Angell and East River streets	1,720 76
Sewer in Staniford street, from Blackstone to Bogman	725 44
Sewer in Union avenue, from Messer street to Huntington avenue	1,713 48
Sewer in Violet street, from Orms northerly	435 69
Sewer in Wayne street, from Douglas avenue to Candace street	781 78
Sewer in Westfield street, from Elmwood avenue to Harrison street	903 65
Sewer in Whitmarsh and Broad streets	11 32
Sewer in Allens avenue Division, Section 10	18,134 44
Sewer in Allens avenue Division, Section 11	34,496 01
Sewer in Allens avenue Division, Section 12	14,749 17
Sewer in Norfolk and Station streets	69 00
Sewer in Woonasquatucket river Division, Section 13	31,861 43
Sewer in Woonasquatucket river Division, Section 14	19,397 38
Grading Norfolk street, from Oak to Cranston	285 00
	$172,368 71

For maintenance $10,135 24

Charged as follows:

Cleaning basins and sewers	$3,560 41
Repairing basins and sewers	1,913 28
Old freight house at city yard	1,000 00
Inspection of connections	960 00
Tools	792 46
Amount carried forward	$8,226 21

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Amount brought forward	$8,226 21	
Cleaning and repairing old drains	763 38	
Salary, superintendent	390 00	
Horses, wagons, harnesses, etc	370 35	
Barn expenses	271 43	
Telephone lines	44 12	
Cleaning private connections	37 40	
Sundries	19 35	
Filling cisterns, etc	13 00	
	$10,135 24	

The *net* expenditure for construction of sewers to September 30, 1894, inclusive, was $4,889,285 11

The *net* expenditure for maintenance of sewers to September 30, 1894, inclusive, was $427,466 19

Bills deposited with the city treasurer for collection from July 1 to September 30, 1894, inclusive, amounted to $196 95

As follows:

Cleaning sewers, etc	$72 60
Cleaning private connections	63 25
Filling cisterns, etc	6 00
Old manhole frame and cover	2 25
Laying drains to curbstone	48 50
Repairing sewer in Grove street	3 45
Testing cement	90
	$196 95

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $129 10

As follows:

Cleaning private connections	$57 00
Cleaning sewers	11 00
Filling cisterns, etc	6 00
Old manhole frame and cover	2 25
Laying drains to curbstone	48 50
Repairing sewer in Grove street	3 45
Testing cement	90
	$129 10

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The amount of bills approved on account of sewers for the fiscal year ending September 30, 1894, inclusive, was:

FOR CONSTRUCTION.

Regular appropriation	$205,519 48	
Improved sewerage appropriation	403,211 61	
		$608,731 09

Charged as follows:

Materials	$97,801 79
Contract reservations	39,963 00
Salaries of assistant engineers	10,816 25
Sundries, improved sewerage system	5,425 04
Clerks' salaries	3,951 79
Sundries	1,850 35
Additional catch-basins	1,348 85
Testing cement	1,260 11
Rent of wharf and pipe yard	750 00
Watchman at city wharf	254 00
Laying drains to curbstone	227 31
Tools	96 16
Sewer in Academy avenue, from Beaufort street to Dover and from Regent avenue to Cambridge street	3,538 21
Sewer in Adelphi avenue, from Elmgrove to Wayland	31 63
Sewer in Alma street, from Candace to Pekin	492 79
Sewer in Althea street, from Cranston to Dexter	1,719 58
Sewer in Atlantic avenue, from Broad street to Hamilton	1,459 64
Sewer in Atlantic avenue, from Elmwood to Hamilton street	1,651 31
Sewer in Balch street, Pacific and Hamburg avenues	3,315 07
Sewer in Bowen street, from Brook to Thayer	513 85
Sewer in Burnett street, Adelaide avenue and Broad street	2,023 17
Sewer in Camp street, from near Grandview to Cypress	906 83
Sewer in Camp, North and North Main streets	13,673 72
Sewer in Canton and Bergen streets	2,723 99
Sewer in Cedar street, from Tefft to Acorn	7 03
Sewer in Douglas avenue, from Whipple street to Orms	1,931 83
Sewer in Duncan avenue, from Knowles street to North Main	1,264 56
Amount carried forward	$198,997 88

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Amount brought forward	$198,997 88
Sewer in Eagle street, from Harris avenue to the river	78 40
Sewer in East avenue, from Pleasant street to Olney	6,250 44
Sewer in East Manning street, from Gano to Wayland avenue	751 04
Sewer in Eddy and Ashmont streets	89 11
Sewer in Elmwood avenue and Roger Williams park	14,464 69
Sewer in Evergreen and Forest streets	6,300 40
Sewer in Federal street, from Sutton to Vinton	125 98
Sewer in Fountain street, from Jackson to Aborn	1,773 32
Sewer in Grove, Helme and River streets	1,903 04
Sewer in Harris avenue, from Broadway to Grove street	2,661 21
Sewer in Hope street, from Thayer to Lloyd	1,937 63
Sewer in Howard and Perry streets, Broadway, Eden and Bell streets	2,483 51
Sewer in Inkerman street, from Candace to Pekin	474 44
Sewer in Jackson avenue, from Potters to Huntington	508 85
Sewer in Jewett and Senter streets	4,263 15
Sewer in Jillson and Eddy streets	6,563 38
Sewer in Lilac street, from Cranston to Salem	1,333 61
Sewer in Logan avenue, from Plain street to Ocean	290 97
Sewer in Meeting street, from Thayer to Brook	298 74
Sewer in Mitchell street, from Broad to Mélrose	1,407 45
Sewer in Moore street, from Updike to Elmwood avenue	597 14
Sewer in Olney street, from Brenton avenue easterly	1,350 83
Sewer in Oriole avenue, Elton street and Adelphi avenue	1,991 46
Sewer in Pacific street, from Broad to Hamilton	103 79
Sewer in Perry and Howard streets	571 56
Sewer in Plain street and Thurbers avenue	7,336 80
Sewer in Potters avenue, Sherburne and Swan streets	2,383 00
Sewer in Potter street, from near Weybosset to Pine	271 80
Sewer in Prairie avenue, from Pavilion to Logan	853 74
Sewer in Public street, from Prairie avenue to Ocean street	599 45
Sewer in Rhodes and Eddy streets	5,944 63
Sewer in Rutland street, from Elmwood avenue to Bucklin street	309 15
Sewer in Salisbury street, from Plain westerly	340 56
Sewer in South Angell and East River streets	1,720 76
Sewer in Stanford street, from Blackstone to Bogman	725 44
Sewer in Superior and Wendell streets	58 60
Sewer in Union avenue, from Messer street to Huntington avenue	2,401 18
Amount carried forward	$280,517 13

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Amount brought forward	$280,517 13
Sewer in Violet street, from Orms street northerly	435 65
Sewer in Wayne street, from Douglas avenue to Candace street	1,327 25
Sewer in Westfield street, from Elmwood avenue to Harrison street	903 65
Sewer in Whitmarsh and Broad streets	646 75
Sewer in Wickenden, South Main and Crawford streets	5,220 20
Sewer in Williams, Fremont, East Transit and Preston streets	37 04
Sewer in Wilson street, from Harrison to Dexter	214 84
Sewer in Allens avenue Division, Section 10	23,788 49
Sewer in Allens avenue Division, Section 11	54,861 87
Sewer in Allens avenue Division, Section 12	75,703 49
Sewer in Aleppo street, from Manton avenue to westerly termination	4,557 94
Sewer in Canal street and Canal avenue	6 99
Sewer in Dorrance street, from Cove to Dyer	8,231 42
Sewer in Gaspee and Cove streets	20,466 18
Sewer in Norfolk and Station streets	49,123 31
Sewer in Promenade street, from Rathbone to Gaspee	2,339 04
Sewer in Tockwotton street, or land owned by the city, from Gano easterly to Seekonk river	73 57
Sewer in Valley street, from Eagle to Rathbone	97 91
Sewer in Woonasquatucket River Division, Section 13	32,589 43
Sewer in Woonasquatucket River Division, Section 14	32,703 93
Grading land on Allens avenue for pumping station	1,708 80
Grading Norfolk street, from Oak to Cranston	13,176 24
	$608,731 09

For maintenance $31,243 1

Charged as follows:

Cleaning basins and sewers	$12,139 06
Repairing basins and sewers	5,988 77
Inspection of connections	3,882 04
Cleaning and repairing old drains	2,306 17
Tools	1,653 81
Salary, superintendent	1,560 00
Horses, wagons, harnesses, etc	1,128 15
Barn expenses	1,115 83
Old freight house at city yard	1,000 00
Cleaning private connections	188 80
Sundries	188 30
Telephone lines	46 12
Filling cisterns, etc	36 05
	$31,243 10

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HIGHWAYS.

Twenty-three permits to open streets were issued during the quarter.

July 23d, the proposal of Narragansett Improvement Company to lay a Trinidad Lake asphalt pavement in Pine street, from Beacon avenue to Broad street, was accepted and a contract subsequently executed.

September 10th, the offer of A. J. Wellington, Manager for Gates Iron Works, to reconstruct and improve the plant of the Gates stone crusher now located on the Cove Lands and change same to the new city yard, foot of Henderson street, was accepted.

September 12th, the proposal of Fred B. Horton for building a three-story brick barn at the corner of Eddy and Henderson streets for the sum of twenty-two thousand and fifty dollars was accepted, and a contract was subsequently executed.

During the quarter the following work was completed:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
Oct. 19, 1893,	*Admiral street, from Whipple to Mowry.*
Nov. 16, "	*Swan street, from Plain to Eddy.*
Dec. 21, "	*Jewett street, from Senter to its westerly termination.*
" " "	*Senter street, from Smith to West Park.*
" " "	*Canton street, from Regent avenue to Chalkstone.*
" " "	*Bergen street, from Regent avenue to Chalkstone.*
May 17, 1894,	*Union avenue, from Messer street to the city line.*

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Date of order.		
May	17, 1894,	*Huntington avenue, from Cranston street to Jackson avenue.*
"	" "	*Mitchell street, from Broad to Melrose.*
June	21, "	*Adelphi avenue, from Taber to Elmgrove.*
"	" "	*Oriole avenue, from Butler to Grand.*
"	" "	*Melrose street, from Adelaide avenue to Irving street.*
"	" "	*Rutland street, from Elmwood avenue to Bucklin street.*

TO TAKE POSSESSION AND REMOVE OBSTRUCTIONS.

May	17, 1894,	*Waterman street, from Benefit street about 200 feet southeasterly.*
July	2, "	*Admiral street, from Whipple to Mowry.*
"	" "	*Clemence street, from Westminster to Washington.*

TO WIDEN ROADWAY.

No. of resolution.	Date of approval.	
629.	Nov. 3, 1893,	*Clemence street, from Westminster to Washington.*

TO PAVE WITH BRICK OR TRINIDAD ASPHALT.

181.	Mch. 30, 1894,	*Clemence street, from Westminster to Washington.*

TO GRADE AND PUT IN GOOD CONDITION.

355.	June 12, 1894,	*Eddy street, from Pavilion avenue to the railroad bridge.*

SIDEWALKS TO BE CURBED.

453.	Aug. 6, 1894,	*Staniford street, adjoining school estate; and in California avenue, adjoining school estate.*

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The following work was in progress September 30, 1894, viz. :

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
June 21, 1894,	*Howard street, from Westminster to Broadway :*—curbing set.
Sept. 6, "	*Atlantic avenue, from Melrose street to Hamilton :*—in process.
" 20, "	*Staniford street, from Blackstone to Willard avenue :*—in process.

TO TAKE POSSESSION, GRADE AND PUT IN GOOD CONDITION.

Sept. 7, 1893,	*Harris avenue, from Acorn street to Kinsley avenue :*—nearly completed.

TO GRADE.

No. of resolution.	Date of approval.	
50.	Jan. 19, 1894,	*Norfolk street, from Oak to Cranston :*—in process.

TO GRADE AND PUT IN CONDITION.

76.	Feb. 2, 1894,	*Blackstone boulevard, from Rochambeau avenue to East :*—nearly completed.

TO BE PAVED WITH GRANITE BLOCKS.

780.	Dec. 3, 1892,	*Gaspee street, from Cove to Promenade :*—in process.

TO BUILD BARN, SET UP STONE CRUSHER, ETC.

467.	Aug. 6, 1894,	*City Yard, Henderson street :*—in process.

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The following work, ordered by the board of aldermen and city council, had not commenced September 30, 1894, viz.:

Sidewalks to be Curbed and Gutters Paved.

Date of order.	
Sept. 20, 1894,	*Althea street, from Dexter to Cranston.*
" " "	*Charles street, from Ledge to Hagan.*
" " "	*Forest street, from Camp to Ivy.*
" " "	*South street, from Eddy to the river.*
" " "	*Promenade street, from Gaspee to railroad abutments.*

To Take Possession and Remove Obstructions.

June 21, 1894, *Williams street, from South Main to Hope.*

To be Paved with Granite Blocks, and Curbed.

No. of resolution.	Date of approval.	
760.	Dec. 22, 1893,	*East street, from Tockwotton to Wickenden; and Wickenden street, from the west side of Hope street to the east side of East street.*
515.	Sept. 25, 1894,	*Promenade street, from the railroad bridge to Gaspee street.*
516.	" " "	*Richmond street, from Ship to Point.*

To Pave with Brick or Trinidad Asphalt.

No. of resolution.	Date of approval.	
183.	Mch. 30, 1894,	*Pine street, from Beacon avenue to Broad street.*

To Bring to Sub-Grade.

517.	Sept. 25, 1894,	*Abbott street, fom Camp to Knowles.*

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To Bring to Sub-Grade and Put in Good Condition.

518.	Sept.	25,	1894,	*New York avenue, from Eddy street to Maryland avenue.*
518.	"	"	"	*Indiana avenue, from Eddy street to Maryland avenue.*
518.	"	"	"	*Ohio avenue, from Eddy street to Maryland avenue.*
518.	"	"	"	*California avenue, from Eddy street to Maryland avenue.*
518.	"	"	"	*Vermont avenue, from Eddy street to Maryland avenue.*
518.	"	"	"	*Washington avenue, from Broad street to Maryland avenue.*
518.	"	"	"	*Massachusetts avenue, from Broad street to Maryland avenue.*
518.	"	"	"	*Virginia avenue, from New York avenue to Montgomery avenue.*
518.	"	"	"	*Maryland avenue, from New York avenue to Montgomery avenue.*

To Concrete Sidewalks.

537.	Sept.	27,	1894,	*Pitman street, from Gano to Wayland avenue.*
537.	"	"	"	*Hayward street, from Linden to Pearl.*
537.	"	"	"	*Diamond street, from Cranston to Superior.*
537.	"	"	"	*Daboll street, from Public to Elmwood avenue.*
537.	"	"	"	*Public street, from Broad to Elmwood avenue.*

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Bills approved on account of highways from July 1 to September 30, 1894, inclusive, amounted to:

Regular appropriation	**$32,690 84**	
Special appropriation	**52,452 12**	
Special credit appropriation	**18,037 37**	
		$103,180 33

Classified as follows:

Cleaning streets	**$15,341 90**	
Repairs on unpaved streets	**4,140 59**	
Repairs on paved streets	**3,535 19**	
Barn expenses	**2,562 65**	
Blacksmith and wheelwright shop	**1,721 74**	
Tools, implements, etc	**1,030 61**	
Salaries—superintendent and clerks	**741 00**	
Sundries	**529 06**	
Steam rollers—repairs and supplies	**519 97**	
Building driveways, etc	**503 22**	
Repairs on stone crushers	**419 58**	
Horses, wagons, harnesses, etc	**219 90**	
Watering streets	**208 74**	
Crushed stone—material and labor	**206 85**	
Watchman at city yard	**204 75**	
Labor on materials	**153 31**	
Removing stone crusher and highway buildings to new city yard	133 26	
Watchman at city wharf	56 00	
Telephone lines	44 12	
Fencing streets—material and labor	34 11	
Office expenses—city yard	5 67	
		$32,312 24

New Work—Building and Rebuilding Streets, Etc.

Sidewalks Curbed and Gutters Paved.

Adelphi avenue, from Taber to Elmgrove	$1,337 75	
Admiral street, from Whipple to Mowry	6,516 47	
America street, from Africa to Atwells avenue	260 79	
Atlantic avenue, from Melrose street to Hamilton	132 43	
Balch street, from Pacific avenue to Jackson	47 78	
Bergen street, from Regent avenue to Chalkstone	2,812 30	
Amounts carried forward	$11,107 52	$32,312 24

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Amounts brought forward	**$11,107 52**	**$32,312 24**
Camp street, from Evergreen to Rochambeau avenue	621 93	
Canton street, from Regent avenue to Chalkstone	2,650 79	
Carleton street, from Beaufort to Chalkstone avenue	285 03	
Cedar street, from Brayton avenue to Acorn street	443 29	
Congdon street, from Halsey to north side of Hidden	495 76	
Congress avenue, from Melrose street to Elmwood avenue	707 48	
Dale street, from Atwells avenue to West Exchange street	168 11	
Elton street, from Elmgrove avenue to Wayland	336 84	
Helme street, from Harris avenue to Valley street	159 71	
Howard street, from Westminster to Broadway	425 63	
Huntington avenue, from Cranston street to Jackson avenue	2,120 57	
Huntington avenue, from McDonough street to Union avenue	1,637 70	
Jewett street, from Senter to its westerly termination	1,283 56	
Melrose street, from Adelaide avenue to Irving street	1,765 93	
Mitchell street, from Broad to Melrose	2,980 73	
North street, from North Main to Swan Point road	1,074 05	
Oriole avenue, from Butler to Grand	1,748 66	
Preston street, from Ives to Gano	611 40	
Redwing street, from Elmwood avenue to land of the N. Y., N. H. and H. R. R. Co	26 07	
Rutland street, from Elmwood avenue to Bucklin street	903 04	
Senter street, from Smith to West Park	978 95	
Staniford street, from Blackstone to Willard avenue	86 00	
Swan street, from Plain to Eddy	1,054 26	
Tremont street, from Charles to Ashburton	230 24	
Union avenue, from Messer street to city line	5,033 02	
Winslow street, from Weybosset to Broad	314 15	
		39,250 42

PAVE WITH GRANITE BLOCKS.

Jackson street, from Westminster to Carpenter	$1,300 85	
South Main street, from Planet to James	286 96	
		1,587 81
Amount carried forward		$73,150 47

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Amount brought forward.....		$73,150 47
PAVE WITH BRICKS OR TRINIDAD ASPHALT.		
Clemence street, from Westminster to Washington.	$1,845 54	
Pine street, from Beacon avenue to Broad street...	77 00	
		1,922 54
TO BE BROUGHT TO GRADE.		
Huntington avenue, from Cranston street to Chambers.....		95
TO GRADE AND BUILD.		
Blackstone boulevard, from Rochambeau avenue to East.....		26,084 57
GRADE AND PUT IN GOOD CONDITION.		
Eddy street, from Pavilion avenue to railroad bridge.....		1,643 20
TAKE POSSESSION, GRADE AND PUT IN GOOD CONDITION.		
Harris avenue, from Acorn street to Kinsley avenue.....		117 00
TAKE POSSESSION.		
Waterman street, from Benefit to a point 200 feet southeasterly.....		261 60
		$103,180 33

Bills deposited with the city treasurer for collection from July 1 to September 30, 1894, inclusive, amounted to . . $10,077 39

As follows:

Union Railroad Co., for granite blocks, etc.....	$8,990 20
Labor and materials.....	939 94
Discharging curbing at city wharf.....	80 25
Manure from barn.....	62 00
Use of sprinkling cart.....	5 00
	$10,077 39

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $1,100 59

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As follows:

Labor and materials	$892 34
Manure from barn	123 00
Discharging curbing at city wharf	80 25
Use of sprinkling cart	5 00
	$1,100 59

Bills approved on account of highways for the fiscal year ending September 30, 1894, inclusive, amounted to:

Regular appropriation	$179,501 84	
Special appropriation	230,370 81	
Special credit appropriation	36,847 76	
		$446,720 41

Classified as follows:

Cleaning streets	$52,610 20	
Repairs on unpaved streets	24,827 93	
Crushed stone—material and labor	21,400 60	
Repairs on paved streets	12,098 89	
Removing snow and ice	11,761 65	
Barn expenses	10,608 04	
Screening gravel	8,759 82	
Blacksmith and wheelwright shop	7,732 01	
Tools, implements, etc	5,839 10	
Steam rollers—repairs and supplies	3,708 80	
Salaries—superintendent and clerks	2,964 00	
Horses, wagons, harnesses, etc	2,715 17	
Labor and materials	1,957 09	
Stone—paving and crosswalk	1,788 58	
Repairs on stone crushers	1,734 41	
Sundries	1,487 12	
Building driveways, etc	1,376 50	
Watchman at city yard	819 00	
Watchman at city wharf	488 10	
Watering streets	367 40	
Fencing streets—material and labor	176 64	
Removing stone crusher and highway buildings to new city yard	133 26	
Office expenses, city yard	117 43	
Repairing sidewalks and driveways opposite public buildings	57 52	
Telephone lines	44 12	
		$175,573 38
Amount carried forward		$175,573 38

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Amounts brought forward	$153,364 55	$173,[illegible] 3
Whipple street, from Admiral to Douglas avenue	67 35	
Winslow street, from Weybosset to Broad	1,108 68	
Wood street, from Messer to Ellery	172 62	
		154,713 3

PAVE WITH GRANITE BLOCKS.

Aleppo street, from Mahton avenue to point opposite property of the Riverside mills	$8,277 12	
Canal street, from Bowen to Smith	2,642 08	
Charles street, from Randall square to near Ashburton street	10,058 67	
Crawford street, from South Main to South Water	1,025 60	
Jackson street, from Westminster to Carpenter	6,796 94	
Olney street, from present end of pavement to Camp	1,397 20	
Page street, from Weybosset to Pine	10 55	
South Main street, from Planet to James	1,779 86	
Stevens street, from easterly side of Charles to Hewes	2,806 25	
Westminster and Weybosset streets	6 40	
Wickenden street, from Transit to Brook	40 15	
		34,860 7[illegible]

PAVE WITH BRICKS.

Eagle street, from Harris avenue to Kinsley	$1,408 88	
Harkness court, from Pine street to Weybosset	111 77	
Mathewson street, from Washington to Cove	1,202 35	
Weybosset street, from Custom House to Post Office court	8 96	
		2,731 9[illegible]

PAVE WITH BRICKS OR TRINIDAD ASPHALT.

Clemence street, from Westminster to Washington	$2,090 97	
Pine street, from Beacon avenue to Broad street	77 00	
		2,167 [illegible]

TO BE BUILT.

Elmwood avenue, from Lexington to railroad bridge		489 [illegible]

TO BE BROUGHT TO GRADE.

Butler avenue, from its southerly terminus to North street	$719 17	
Huntington avenue, from Cranston street to Chambers	7,888 47	
Melrose street, from Adelaide avenue to Roger Williams	3,056 00	
		11,663 [illegible]
Amount carried forward		$282,180 [illegible]

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Amount brought forward		$382,180 80
To Grade and Build.		
Blackstone boulevard, from Rochambeau avenue to East		33,028 26
To Grade and Put in Good Condition.		
Academy avenue, from Chalkstone to Smith street.	$7,089 57	
Eddy street, from Pavilion avenue to the railroad bridge	1,643 20	
Gordon avenue, from Colfax street to Public	910 63	
Promenade street, from Holden to Hemlock	14,279 32	
		23,922 72
Take Possession, Grade and Remove Obstructions.		
Bucklin street, from Daboll to Cromwell	$890 07	
Harris avenue, from Acorn street to Kinsley avenue	940 74	
		1,830 81
Take Possession.		
Waterman street, from Benefit to a point 200 feet southeasterly		261 60
Macadamize.		
Smith street, from River avenue to the city line		2,052 88
To Repair.		
Sixth Police District, sidewalks around poles of police signal system	$27 00	
Stewart street, from Westminster to Broad	536 68	
		563 68
Construct Channel for Storm Water.		
Vale street, across Danforth on to the land owned by the city		1,788 49
Build Storm Sewer.		
Through land of Riverside Mills, from Aleppo street to Woonasquatucket river		1,091 17
		$446,720 41

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SIDEWALKS AND CURBING.

The expenditures on account of sidewalks and curbing from July 1 to September 30, 1894, inclusive, amounted to $2,562 13

Charged as follows:

Granite curbing	$2,212 13
Setting curbing on Staniford street, adjoining school estate, and on California avenue, adjoining school estate	350 00
	$2,562 13

Curbing bills deposited with the city treasurer for collection from July 1 to September 30, 1894, inclusive, amounted to $1,696 10

During the quarter coupons from curbing bills collected have been returned by the city treasurer and receipted for, amounting to $3,669 17

The expenditures on account of sidewalks and curbing for the fiscal year ending September 30, 1894, inclusive, amounted to $51,491 50

Classified as follows:

Granite curbing	$49,333 31
Concreting sidewalks	1,641 44
Setting curbing on Staniford street, adjoining school estate, and on California avenue, adjoining school estate	350 00
Setting curbing on Goddard street, adjoining Candace street school estate	166 75
	$51,491 50

CITY ENGINEER.

Bills approved on account of the city engineer's department from July 1 to September 30, 1894, inclusive, amounted to $15,158 24

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Charged as follows:

Salary—city engineeer	$1,500 00
Salaries of assistants	11,633 00
Salaries of clerks	763 75
Instruments and repairs	531 53
Horse-car tickets, etc	452 00
Supplies—drawing materials, etc	156 13
Telephone lines	82 06
Sundries	32 90
Horse hire, barn expenses, etc	6 87
	$15,158 24

Bills deposited with the city treasurer for collection from July 1 to September 30, 1894, inclusive, amounted to $4 78

As follows:

Tracing paper	$3 60
Field books	1 18
	$4 78

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $4 78

As follows:

Tracing paper	$3 60
Field books	1 18
	$4 78

Bills approved on account of city engineer's department for the fiscal year ending September 30, 1894, inclusive, amounted to . . . $57,490 92

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Charged as follows:

Salary—city engineer	$6,000 00
Salaries of assistants	44,895 59
Salaries of clerks	3,055 00
Horse-car tickets etc	1,464 00
Supplies—drawing materials, etc	942 03
Instruments and repairs	860 88
Sundries	161 99
Telephone lines	82 06
Horse hire, barn expenses, etc	29 37
	$57,490 92

BRIDGES.

September 4th, the offer of the Rhode Island Concrete Co. to lay asphalt concrete at Charles street bridge over the West river was accepted.

During the quarter the following work was completed, viz.:

No. of resolution.	Date of approval.	
221.	April 20, 1894,	*Charles street bridge, over the West river.*

The following work was in progress at the end of the quarter, namely:

No. of resolution.	Date of approval.	
830.	Dec. 20, 1892,	*Francis street bridge, over Woonasquatucket river.*
48.	Jan. 19, 1894,	*New City Yard, Henderson street:* —to grade and fence.
215.	April 17, "	*Stevens street bridge, over the Moshassuck river.*

The following work had not commenced September 30, 1894, namely:

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No. of resolution.	Date of approval.	
831.	Dec. 20, 1892,	*Oak street foot-bridge, over railroad tracks.*
511.	Sept. 25, 1894,	*Red bridge, over the Seekonk river.*

Bills approved on account of bridges from July 1 to September 30, 1894, inclusive, amounted to $13,835 86

Charged as follows:

Acorn street bridge—to repair	$1 30
Atwells avenue bridge	49 82
Barn expenses	78 88
Branch avenue bridge	2 50
Building at city yard	2 75
Central or Red bridge	67 25
Charles street bridge—to rebuild	3,743 10
Crawford street bridge	17 36
Delaine street bridge	33 61
Eagle street bridge	1 30
Exchange bridge	1 79
Gaspee street bridge	62 33
Geneva bridge	3 76
Hawkins street bridge	75
Horses, wagons, harnesses, etc	10 00
Lumber, hardware, etc	11 94
Nash lane bridge	41 94
Park street bridge	15 79
Point street bridge	270 64
Randall street bridge	107 88
Rent of keeper's house, Washington bridge	30 00
Salaries—Central or Red bridge	461 50
Salaries—Point street bridge	1,029 00
Salaries—Washington bridge	510 16
Smith street bridge	1 15
Smithfield avenue bridge	6 75
Stevens street bridge—to rebuild	6,739 96
Sundries	161 12
Telephone lines	76 06
Tools	123 21
Valley street bridge—north span	95
Valley street bridge—south span	2 22
Veazie street bridge	1 50
Washington bridge near India Point	160 84
West River street bridge	6 00
Whelden street bridge	75
	$13,835 86

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Bills deposited with the city treasurer for collection from July 1 to September 30, 1894, inclusive, (for old lumber from various bridges) amounted to $5 25

During the quarter coupons from bills collected (for old lumber sold) have been returned by the city treasurer and receipted for, to the amount of $5 25

Bills approved on account of bridges for the fiscal year ending September 30, 1894, inclusive, amounted to $35,562 58

Charged as follows:

Acorn street bridge—to build	$6 65
Acorn street bridge—to repair	2 52
Atwells avenue bridge	52 67
Barn expenses	286 97
Branch avenue bridge	128 25
Branch avenue culvert	70
Building at city yard	29 25
Cemetery street bridge	4 06
Central or Red bridge	1,703 43
Charles street bridge—to repair	4 71
Charles street bridge—to rebuild	4,679 07
Crawford street bridge	78 47
Delaine street bridge	65 71
Eagle street bridge	21 99
Exchange bridge	4 03
Gaspee street bridge	76 25
Geneva bridge	3 76
Hawkins street bridge	2 45
Horses, wagons, harnesses, etc	191 51
Lumber, hardware, etc	274 59
Mill street bridge	7 92
Nash lane bridge	43 32
Park avenue culvert	35 99
Park street bridge	30 11
Point street bridge	2,154 58
Randall street bridge	107 88
Rent of keeper's house, Washington bridge	120 00
Salaries—Central or Red bridge	1,851 28
Salaries—Point street bridge	3,997 00
Amount carried forward	$15,965 13

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Amount brought forward	$15,965 13
Salaries—Washington bridge	1,987 65
Smith street bridge	1 15
Smithfield avenue bridge	22 22
Stevens street bridge—to rebuild	6,741 41
Stevens street bridge—to repair	19 26
Sundries	611 48
Tar bridge—Manton avenue	9 71
Telephone lines	76 06
Tools	513 03
Valley street bridge—north span	8 70
Valley street bridge—south span	6 89
Veazie street bridge	387 06
Wanskuck bridge	6 88
Washington bridge, near India Point	1,554 40
Washington bridge, over Providence river—to rebuild	7,618 99
West River street bridge	10 37
Weybosset bridge	2 56
Whelden street bridge	18 98
	$35,562 53

CONTINGENCIES.

Bills approved from July 1 to September 30, 1894, inclusive, for grading and fencing new city yard, Henderson street, have been paid from the appropriation for contingencies to the amount of $549 26

Bills approved for the fiscal year ending September 30, 1894, inclusive, and paid from the appropriation for contingencies, amounted to . $22,386 75

Charged as follows:

Bath street—to repair	$2,832 12
Jewett street—to repair	4,856 87
Okie street—to repair	6,488 65
West Park street—to repair	3,032 23
Building wharf at new city dock	3,428 57
Grading and fencing new city yard, Henderson street	1,748 31
	$22,386 75

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FILLING COVE BASIN.

Bills approved and paid from the appropriation for filling the cove basin, from July 1 to September 30, 1894, inclusive, amounted to . . . $3,852 92

Charged as follows:

Francis street bridge—to build	$2,715 97
Gaspee street, from Cove to Promenade	1,136 95
	$3,852 92

Bills approved for the fiscal year ending September 30, 1894, inclusive, for account of filling the cove basin, amounted to $60,660 89

Charged as follows:

Francis street bridge—to build	$59,523 94
Gaspee street, from Cove to Promenade	1,136 95
	$60,660 89

ROBERT E. SMITH,

Commissioner.

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FORTY-EIGHTH QUARTERLY REPORT

OF THE

Department of Public W

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING DECEMBER 31,

The Standard Printing
Snow & Farnham, City Printers,
14 Custom House Street.
1895.

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FORTY-EIGHTH

QUARTERLY REPORT

OF THE

Department of Public Works

OF THE

CITY OF PROVIDENCE, R. I.

QUARTER ENDING DECEMBER 31, 1894.

The Providence Press:
SNOW & FARNHAM, CITY PRINTERS,
15 Custom House Street.
1895.

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ASTOR, LENOX AND
TILDEN FOUNDATIONS.
1900.

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REPORT.

OFFICE OF THE DEPARTMENT OF PUBLIC WORKS,
CITY HALL, PROVIDENCE, R. I., January 1, 1895.

TO THE HONORABLE THE CITY COUNCIL:

In compliance with the requirements of Chapter IV. of the ordinances, the Commissioner of Public Works respectfully presents the forty-eighth quarterly report of the expenditures by the several departments under his direction and control, with statements of work ordered and the condition and cost of same for the quarter ending December 31, 1894:

WATER WORKS.

December 4th, the offer of the Coffin Valve Company, of Neponset, Mass., to furnish and deliver in this city the following water gates, fire hydrants, etc., was accepted, namely:

5 2½-inch water gates;
15 4-inch water gates;
60 6-inch water gates;
15 8-inch water gates;
60 6-inch fire hydrants;
60 hydrant boxes, frames and covers;
5 hydrant boxes with street sprinkler covers.

Amount, $7,205.00.

December 8th, the offer of John W. Lyon to furnish and deliver taps and stops of various sizes, for the year 1895, was accepted. Amount, $1,140.25.

December 11th, the proposal of Fuller Iron Works to furnish special castings, service boxes and castings for sewers required during 1895, was accepted and a contract subsequently executed.

December 12th, the offer of The Thomas Phillips Co. to furnish and deliver thirty thousand pounds lead pipe of vari-

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ous sizes and sixteen thousand pounds pig lead, Anchor brand, was accepted. Amount; $1,609.80.

December 12th, the offer of L. H. Tillinghast & Co. to furnish and deliver thirty thousand pounds lead pipe and sixteen thousand pounds pig lead, Anchor brand, was accepted. Amount $1,609.80.

December 12th, the offer of The Congdon & Carpenter Co. to furnish and deliver six hundred pounds pig tin was accepted. Amount, $87.60.

December 28th, the offer of Warren Foundry and Machine Co., of Phillipsburg, N. J., to furnish and deliver about 466 tons of cast iron water pipes was accepted and a contract subsequently executed. Amount, $9,690.51.

December 29th, the proposal of The Pomroy Coal Co. to furnish the teams required for teaming at the city pipe yard during the year 1895 was accepted.

The average daily consumption of water during the last quarter was 9,385,686 gallons, and the average daily consumption for the year 1894 was 9,904,434 gallons.

Water pipes were laid during the quarter, as follows:

12-INCH.	
In Harris and Kinsley avenues	2,407.86 feet.
8-INCH.	
In Frost and Pontiac streets, Harris and Maryland avenues, and in Old Killingly road, town of Johnston	2,195.46 feet.
6-INCH.	
In Aldrich, Autumn, David, Dixon, Elswald, Ellery, Gray, Jastram, Jewett, Langdon, Ledge, MacGregor, Montgomery, Nashua, Nebraska, Pitman, Polk, Prosper, Ridge, Sawyer, Spruce, Stevens, Udell, Wadsworth, Wendell, Wilcox and Windmill streets, Indiana, Lenox and Stamford avenues, new city yard and Eaton court; in Randall avenue, town of Johnston; and in Appleton, Barrett, Beacon, Benedict, Berkeley, Crawford, Gordon, Lowell, Wayne, Wessex and Winthrop streets, Burnham, Crescent, Doric, Wellington and Wentworth avenues, town of Cranston	15,860.85 feet.
Total	20,464.17 feet,

or 3.876 — miles.

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Statement of sizes and lengths of pipe laid since the commencement of the work:

36-inch	10,084.00 feet.
30-inch	59,893.04 feet.
24-inch	43,553.03 feet.
20-inch	9,626.59 feet.
16-inch	33,243.82 feet.
12-inch	80,854.77 feet.
10-inch	14,653.13 feet.
8-inch	240,441.06 feet.
6-inch	1,069,124.24 feet.
Total	1,501,473.68 feet,

or 284.370+ miles.

Twenty fire hydrants have been set during the quarter, one in each of the following locations:

Aldrich street, north side, about 386 feet east of Broad street.
Angell street, north-west corner of Grand avenue.
Atlantic street, north side, 240 feet west of Hamilton street.
Barrows street, Johnston, north-east side, opposite north-east line of Harlan street.
Eden street, east side, about 310 feet south of Bell street.
Elswald street, east side, about 433 feet north of Grove street.
Elm street, Cranston, east side, about 445 feet north of Governor street.
Harris avenue, north side, about 580 feet west of Kinsley avenue.
Langdon street, east side, opposite south line of Udell street.
MacGregor street, north side, about 400 feet west of Langdon street.
Old Killingly road, Johnston, east side, about 440 feet south of Hartford avenue.
Pavilion avenue, north side, 14 feet east of Ocean street.
Pontiac street, east side, 85 feet south of Reservoir avenue.
Roger Williams avenue, Cranston, north side, about 700 feet east of Dyer avenue.
Snow street, easterly side, 9 feet north of Westminster street.
Snow street, easterly side, 20 feet southerly from present line of Washington street.
Spruce street, north side, about 132 feet east of Brayton avenue.
Staniford street, north-east corner of Willard avenue.
Union street, east side, about 9 feet north of Washington street.
Wilcox street, north-east side, about 242 feet south-east of Cross street.

The total number of fire hydrants is now sixteen hundred and fifty-two: fifteen hundred and ninety-six flush and fifty-six post hydrants.

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During the quarter two hundred and seventy-nine water meters were set, of which number eighteen were to replace other meters. The use of three meters was discontinued.

The following meters were in use at the close of the quarter:

Kind.	Size.								Total.
	⅝-in.	¾-in.	1-in.	1½-in.	2-in.	3-in.	4-in.	6-in.	
Ball & Fitts, piston	3,071	617	148	33	6	.....	.....	.....	3,[illegible]
Ball & Fitts, rotary	.....	.....	22	19	2	2	2	.....	[illegible]
Crown	6,242	666	173	81	22	11	10	.....	7,[illegible]
Fales, Jenks & Sons	.....	.....	1	.....	.....	.....	.....	.....	1
Thomson	1,603	255	57	42	17	5	4	4	1,[illegible]
Trident	28	.....	.....	.....	.....	.....	.....	.....	[illegible]
Worthington	3	1	.....	.....	1	.....	1	.....	6
	10,947	1,541	401	175	49	19	17	4	13,[illegible]

Two plumbers' licenses have been issued during the quarter, making the total number one hundred and eight, all of which expire December 31, 1894.

Nine hundred and thirteen permits to do plumbing work were issued during the quarter.

One hundred and ninety-five applications for water were made during the quarter, making the total number December 31, 1894, twenty thousand, two hundred and twenty-four.

The number of new service stops opened during the quarter was two hundred and seventeen.

The total number of service stops opened to December 31, 1894, inclusive, was nineteen thousand, five hundred and twenty. The number in actual use December 31, 1894, was eighteen thousand, one hundred and fifty-two.

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The following table shows the lengths, sizes, etc., of services laid during eighteen years ending December 31, 1894:

YEARS.	Lengths of Services Laid in Feet.							Trenching.	Paving.	Taps Used.						Stops Used.						Service boxes used.
	Sizes of Pipe.						Totals.															
	½ inch.	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	1½ inch.				½ in.	⅝ in.	¾ in.	1 in.	Totals.	½ in.	⅝ in.	¾ in.	1 in.	Totals.		
1877....	2,776.8	8,679.3	1,884.4	248.8	114.2	7.	13,710.5	14,422.44	2,105.67	173	571	114	15	6	879	173	571	114	15	6	879	896
1878....	2,209.8	6,881.8	1,436.6	119.4	120.7	35.3	10,803 6	11,365 38	1,659.34	133	427	91	7	13	671	148	464	91	7	12	722	725
1879....	1,624.9	6,107.5	874.4	275.7	66.2	7.	8,955.7	9,421.40	1,375.52	101	335	57	17	9	519	109	380	60	17	9	575	572
1880....	2,163.6	5,951.2	1,150.	483.6	186.1	16.9	9,951.4	10,468 87	1,528.45	136	334	66	25	17	578	141	358	67	26	17	609	603
1881....	1,078.9	6,269.4	741.1	253.1	233.4	8.4	8,584.3	9,067.2	1,330.6	68	392	55	21	18	554	71	411	47	17	18	564	559
1882....	.....	8,073.8	581.3	226.3	92.	32.	9,005.5	9,481.5	1,020.	.	511	49	17	15	592	....	525	41	15	14	595	610
1883....	9.	8,075.83	761.09	143.	131.9	60.	9,180.82	9,649.5	1,284.5	1	508	61	12	14	596	2	537	44	10	13	606	629
1884....	.....	8,048.72	732.2	266.4	119.6	23.2	9,190.02	9,715.5	1,054 6	...	512	64	18	17	611	...	539	51	15	13	618	641
1885....	33.9	7,971.78	667.1	106.4	34.	28.4	8,841.58	9,283.	1,109 5	....	490	48	11	7	556	1	519	32	5	6	563	586
1886....	23.	7,764.6	699.5	115.4	98.6	25.4	8,726.5	9,213.5	965.5	....	481	64	13	12	570	....	518	49	7	11	585	609
1887....	.....	8,381.8	456.6	81.4	75.8	20.2	9,015.8	9,422.	1,164.1	....	516	47	11	11	585	....	543	32	7	10	592	612
1888....	.....	7,496.6	553.6	66.8	105.2	55.8	8,278.	8,768.	1,072.5	....	495	52	9	10	566	....	519	39	5	10	573	587
1889....	.....	9,211.9	514.2	199.	90.2	8.2	10,023 5	10,563.	1,125.5	....	546	53	18	10	627	....	579	37	12	6	634	664
1890....	.....	8,997.8	671.3	194.7	241.6	61.2	10,166.6	10,792.5	1,183.	....	549	58	17	16	640	...	586	42	11	15	654	680
1891....	.....	12,531.28	965.5	237.2	311.9	53.5	14,090.38	14,816.	1,445.	....	729	88	30	24	871	....	797	66	18	22	903	944
1892....	.....	14,672.27	1,284.6	152.9	248.8	.....	16,358.57	17,177.	1,945.5	....	853	103	22	17	995	...	943	75	9	17	1,044	1,093
1893....	.....	11,153.2	936.5	245.7	248.6	.....	12,584.	13,214.5	1,590.	....	672	81	24	17	794	....	727	65	14	16	822	851
1894....	.....	12,285.2	756.5	391.4	129.2	15.2	13,577.5	14,129.5	1,643.	....	724	59	33	12	828	....	763	47	23	11	844	867
Total ..	9,919.9	158,553.98	15,666.49	3,807.2	2,648.	457.7	191,053.27	200,970.79	24,602.28	612	9,645	1,210	320	245	12,032	645	10,279	999	233	226	12,382	12,728

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The following table shows the lengths, sizes, etc., of services laid during the year ending December 31, 1894:

Months.	Length of Services Laid in Feet.								Taps Used.					Stops Used.					Service boxes used.
	Sizes of Pipe.						Trenching.	Paving.											
	⅝ inch.	¾ inch.	1 inch.	1¼ inch.	1½ inch.	Totals.			½ in.	⅝ in.	¾ in.	1 in.	Totals.	½ in.	⅝ in.	¾ in.	1 in.	Totals.	
January	112.	8.2	.....	.....	.....	120.2	128	19.	10	1	...	....	11	10	1	....	....	11	11
February	32.8	.....	.....	16.4	.....	49.2	54.	9.	3	1	....	2	6	4	....	....	2	6	7
March	767.9	88.8	.....	8.2	.....	864.9	911.5	110.	53	4	....	1	58	53	4	....	1	58	58
April	1,064.4	89.	8.2	.....	7.	1,168.6	1,226.	189.5	65	5	3	1	74	67	5	1	1	74	76
May	1,233.2	36.6	.....	.....	.....	1,269.8	1,333.	122.5	73	5	1	....	79	77	4	....	....	81	83
June	1.744.1	168.6	270.4	.....	.....	2.183.1	2,284.	333.5	99	8	20	....	127	105	8	17	....	130	133
July	1,403.9	102.5	70.	.....	8.2	1,584.6	1,554.	137.	68	7	2	1	78	72	5	1	1	79	82
August	1,898.8	10.	8.2	.....	.....	1,917.	2,003.	185.	108	2	2	....	112	114	1	1	....	116	118
September	1,034.2	166.2	18.2	42.6	.....	1,261.2	1,328.	196.	67	13	2	3	85	73	11	1	3	88	91
October	1,350.1	49.8	8.2	16.4	.....	1,424.5	1,502.5	187.	66	7	2	3	78	72	4	1	2	79	84
November	826.2	28.6	8.2	.....	.....	863.	911.	58.	59	5	1	....	65	61	3	1	....	65	67
December	817.6	8.2	.....	45.6	.....	871.4	894.5	96.5	53	1	...	1	55	55	1	....	1	57	57
Totals	12,285.2	756.5	391.4	129.2	15.2	13,577.5	14,129.5	1,643.	724	59	33	12	828	763	47	23	11	844	867

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Changes in size and location of services in 1894:

Taps and Stops.										Sizes and Lengths of Lead Pipe.										Trenching.	Paving.	Change in size only.	Change in location only.	Changes in both size and location.
Taken Out.					Inserted.					Taken Out.					Inserted.									
3 8 inch.	1-2 inch.	5-8 inch.	3 4 inch.	1 inch.	3-8 inch.	1-2 inch.	5-8 inch.	3-4 inch.	1 inch.	1-2 inch.	5-8 inch.	3-4 inch.	1 inch.	1 1-4 inch.	5-8 inch.	3-4 inch.	1 inch.	1 1-4 inch.	1 1-2 inch.					
26	20	2	3	5	.....	31	7	3	9	409.5	326.8	53.2	54.6	36.4	600.2	77.	42.2	151.	.....	1168	307.5	34.	14.	1

Seven services have been removed.
Two services have been abandoned.

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The following table exhibits the number of service stops opened each month from the commencement to December 31, 1894:

Months.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.
January	.....	54	33	21	34	55	15	49	9	20	7	17	15	21	17	18	26	7	39	36	39	56	40	29
February	.....	47	18	18	7	25	23	18	9	19	3	11	9	10	7	15	7	10	21	25	26	28	24	28
March	.....	38	34	63	7	45	32	60	19	46	23	39	11	28	9	24	16	14	19	28	24	28	36	40
April	.....	109	109	108	32	108	82	78	52	58	55	49	55	62	48	68	60	38	61	53	73	76	71	76
May	.....	224	206	147	162	168	136	95	80	84	66	72	78	62	62	61	70	52	74	66	114	83	91	81
June	.....	329	295	151	172	148	114	103	71	109	82	48	64	81	81	59	50	86	59	80	83	103	106	105
July	.....	333	261	127	141	158	83	80	49	75	56	77	66	76	77	83	62	59	74	67	85	105	93	80
August	.....	224	209	123	83	94	91	51	51	39	58	87	69	61	57	71	49	52	56	76	95	104	115	116
September	.....	184	147	139	101	94	80	63	44	37	60	67	93	50	70	59	74	63	64	77	93	114	88	112
October	.....	138	135	160	92	84	81	78	79	48	61	56	47	65	62	52	80	70	64	54	104	102	96	85
November	.....	100	104	185	86	54	73	57	63	54	37	64	49	51	39	57	69	47	58	72	81	118	80	70
December	56	83	45	122	60	35	55	45	47	29	40	27	56	44	46	28	49	42	53	50	83	102	62	62
Totals	56	1,863	1,596	1,364	977	1,068	865	777	573	618	548	614	612	611	575	595	612	570	642	684	900	1,014	902	884

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The receipts for water each year since the commencement have been as follows:

Year.	Amount.	Year.	Amount.
1872	$41,003 51	1884	$302,368 36
1873	97,386 09	1885	313,561 21
1874	132,052 39	1886	323,084 67
1875	165,144 71	1887	339,513 60
1876	183,868 73	1888	346,731 58
1877	200,039 39	1889	377,497 97
1878	218,883 33	1890	401,140 86
1879	229,551 78	1891	404,553 84
1880	247,705 06	1892	409,421 21
1881	260,530 87	1893	427,546 51
1882	269,318 77	1894	432,383 97
1883	283,632 89		

The amount of bills approved on account of water works from October 1 to December 31, 1894, inclusive, was:

For construction and extension . . $26,468.93

Classified as follows:

Worthington high duty pumping engine	$14,339 25
Laying water pipe	5,459 31
Service pipe	2,257 46
Laying service pipe	1,254 86
Cast iron water pipe	1,165 23
Special castings	471 93
Nagle pumping engine, Hope Station	366 76
Barn expenses	214 05
Labor on and carting pipe	208 65
Keeper's house, Fruit Hill Reservoir	197 46
Wharf salaries	195 00
Taps and stops	147 30
Tools	114 04
Horses, wagons, harnesses, etc	57 63
Watchman at city wharf	20 00
	$26,468 93

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For maintenance $32,339 66

Classified as follows:

PETTACONSET PUMPING STATION.

Coal and wood	$5,353 79	
Engineers	840 25	
Sundries	735 44	
Firemen	679 80	
Cornish engine house	615 49	
Superintendence	259 80	
Corliss pumping engine and house	201 21	
Labor on fuel	174 75	
Oil, waste and packing	122 62	
Real estate	98 87	
Lights	45 42	
Barn expenses	43 25	
Worthington pumping engine	6 92	
		9,216 31

SOCKANOSSET RESERVOIR.

Watchman	$182 80	
Sundries	8 55	
		190 35

HOPE PUMPING STATION.

Engineers	$575 25	
Firemen	418 60	
Lights	97 75	
Hope pumping engine, No. 2	73 04	
Care of grounds	59 50	
Sundries	47 30	
Coal and wood	16 25	
Hope pumping engine, No. 1	1 25	
Oil, waste and packing	50	
		1,289 44

HOPE RESERVOIR.

Watchman	$204 75	
Sundries	4 62	
		209 37

FRUIT HILL RESERVOIR.

Sundries	$505 24	
Watchman	204 75	
		709 99
Amount carried forward		$11,615 56

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Amount brought forward		$11,615 56

PIPE LINE AND SERVICE STOPS.

Repairs	$2,339 27	
Superintendence—salaries	872 19	
		3,211 46

METER DEPARTMENT.

Water meters	$5,059 60	
Setting and repairing meters	1,318 92	
		6,378 52

MISCELLANEOUS.

Town of Cranston tax	$6,839 08	
Clerks' and inspectors' salaries	2,997 80	
Prevention of defilement of the Pawtuxet	468 95	
Town of North Providence tax	400 00	
Barn expenses	208 56	
Analyses of water	105 00	
Sundries	61 13	
Pipe yard, office expenses	33 95	
Town of Lincoln tax	18 90	
Horses, wagons, harnesses, etc	75	
		11,134 12
		$32,339 66

The amount of expenditures from October 1 to December 31, 1894, inclusive, was . $58,808 59

The total expenditures to December 31, 1894, inclusive, were $8,030,105 23

The *net* expenditure for construction and extension from October 1 to December 31, 1894, inclusive, was	$25,592 92
The *net* expenditure for construction and extension to December 31, 1894, inclusive, was	$6,067,017 17
The *net* expenditure for maintenance from October 1 to December 31, 1894, inclusive, was	$24,852 07
The *net* expenditure for maintenance to December 31, 1894, inclusive, was	$1,233,651 08

Bills deposited with the city treasurer for collection from October 1 to December 31, 1894, inclusive, amounted to $60,422 20

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As follows:

Water	$51,769 53
Water meters	5,314 00
Setting and repairing meters	2,030 68
Rent of real estate	287 25
Permanently closing service stops	95 00
Examination and repairs of pipe line	25 60
Penalties	24 00
Labor and material, laying service pipes, etc	598 15
Use of hoisting engine	112 00
Setting up drinking trough for town of Johnston	80 05
Old brass	77 48
Old rope and rubber	8 46
	$60,422 20

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to . . . $61,400 86

As follows:

Water	**$53,037 97**
Water meters	**5,210 75**
Setting and repairing meters	**1,942 68**
Rent of real estate	**168 00**
Permanently closing service stops	**90 00**
Examination and repairs of pipe line	**56 16**
Penalties	**24 00**
Labor and material, laying service pipes, etc	**593 31**
Use of hoisting engine	**112 00**
Setting up drinking trough for town of Johnston	**80 05**
Old brass	**77 48**
Old rope and rubber	**8 46**
	$61,400 86

SEWERS.

During the quarter ending December 31, 1894, three hundred and sixty-two permits were issued to drain layers: two hundred and fifty-one for new work and one hundred and eleven for extension and repairs of drains.

Four drain layers' licenses were issued during the quarter, making the total number fifty-six, all of which expire December 31, 1894.

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October 30th, the offer of Frederick E. Shaw to extend Section 10 of the improved sewerage system, to the new sewage pumping station at Ernest street was accepted.

December 27th, the proposal of John W. Mathewson & Son, of Greenville, R. I., to furnish and deliver one hundred and eighty sets granite catch-basin inlet stones was accepted and a contract subsequently executed. Amount, $1,161.00.

December 27th, the proposal of Manchester & Hudson to furnish and deliver two hundred flagstones for catch-basins was accepted and a contract subsequently executed. Amount, $900.00.

December 27th, the proposal of Winslow & Company, proprietors of Portland Stone Ware Co., of Portland, Maine, to furnish and deliver vitrified sewer pipe, etc., was accepted and a contract subsequently executed. Amount, $4,772.34.

December 29th, the proposal of Herbert R. Horton to furnish the cement required during the year 1895, delivered on the work, was accepted and a contract subsequently executed.

SEWERS BUILT, IN MILES, TO DECEMBER 31, 1894.

ITEMS.	KIND.	Built Previous to 1894.	Built During 1894.	Total to Dec. 31, 1894.
Under regular appropriation.....	Brick.....	28.368	1.980	30.348
Under regular appropriation.....	Pipe.....	85.046	8.115	93.161
Under improved sewerage appropriation.....	Brick and Pipe	15.250	2.988	18.238
Total miles of sewers.....		128.664	13.083	141.747

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During the quarter assessments for the cost of constructing sewers were certified to the city treasurer, as follows:

Promenade street, from Rathbone to Gaspee	$5,563 36
Canal street and Canal avenue	3,189 58
Jewett and Senter streets	7,629 24
Westfield street, from Elmwood avenue to Harrison street	1,966 36
Alma street, from Candace to Pekin	1,087 08
Wayne street, from Douglas avenue to Candace street	1,887 99
Canton and Bergen streets	5,302 21
Atlantic avenue, from Broad street to Hamilton	4,035 27
Jackson avenue, from Potters avenue to Hamilton street	1,616 18
Burnett street, Adelaide avenue and Broad street	5,422 62
Elmwood avenue and Roger Williams Park	9,564 68
Broad street, from Lenox avenue to Thurbers	76 60
Total	$47,341 17

October 1st, a contract for the construction of the following sewer, which was subsequently executed, was awarded as follows, namely:

[The amounts given below are what are estimated will be paid the contractors for labor, and do not include the cost of inspection and materials, or rock excavation.]

To George R. Newman & Co.

No. of resolution.	Date of approval.		
520.	Sept. 25, 1894,	*Medway street, from Gano to near Ives,*	$503 40

October 23d, contracts for the construction of the following sewers were awarded and subsequently executed, namely:

To Timothy F. Lyons.

No. of resolution.	Date of approval.		
564.	Oct. 19, 1894,	*Abbott street, from Camp to Knowles,*	$5 05

To George R. Newman & Co.

No. of resolution.	Date of approval.		
565.	Oct. 19, 1894,	*Benevolent street, from the summit near Cooke to Hope,*	412 40

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No. of resolution.	Date of approval.				
566.	Oct.	19,	1894,	*Butler avenue, from Angell street to South Angell,* . .	$436 60

To William H. Sherman.

No. of resolution.	Date of approval.				
563.	Oct.	19,	1894,	*Wendell and Ellery streets,*	$971 30

To Everson & Liddle.

No. of resolution.	Date of approval.				
567.	Oct.	19,	1894,	*Eddy and Broad streets,*	$5,253 50

November 13th, a contract for the construction of the following sewer, which was subsequently executed, was awarded as follows, namely:

To George R. Newman & Co.

No. of resolution.	Date of approval.				
592.	Nov.	7,	1894,	*Ives street, from Medway to Waterman,*	$316 20

November 22d, a contract for the construction of the following sewer was awarded and subsequently executed, namely:

To George R. Newman & Co.

No. of resolution.	Date of approval.				
618.	Nov.	20,	1894,	*Stewart street, from Broad to Conduit,* .	$263 60

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During the quarter the construction of the following sewers was completed, namely:

No. of resolution.	Date of approval.				Date of completion.		
564.	Sept.	23,	1893,	*Section* 11, *Allens avenue Division*,	Nov.	3,	1894.
564.	"	"	"	*Section* 13, *Woonasquatucket river Division*,	Oct.	6,	1894.
564.	"	"	"	*Section* 14, *Woonasquatucket river Division*,	Dec.	24,	1894.
285.	May	18,	1894,	*South Angell and East River streets*,	Oct.	23,	1894.
401.	July	3,	"	*Althea street, from Cranston to Dexter*,	Oct.	8,	1894.
419.	July	11,	1894,	*Gesler street, from Courtland to Almy*,	Oct.	24,	1894.
420.	"	"	"	*Howard and Perry streets, Broadway and Eden street*,	Nov.	20,	1894.
422.	"	"	"	*Orchard and Fruit streets*,	Oct.	18,	1894.
520.	Sept.	25,	"	*Medway street, from Gano to near Ives*,	Nov.	16,	1894.
563.	Oct.	19,	"	*Wendell and Ellery streets*,	Dec.	3,	1894.
564.	"	"	"	*Abbott street, from Camp to Knowles*,	Jan.	1,	1895.
565.	"	"	"	*Benevolent street, from summit near Cooke to Hope*,	Nov.	19,	1894.
566.	"	"	"	*Butler avenue, from Angell street to South Angell*,	Dec.	1,	1894.

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No. of resolution.	Date of approval.				Date of completion.
592.	Nov.	7,	1894,	*Ives street, from Medway to Waterman,*	Nov. 24, 1894.
618.	"	20,	"	*Stewart street, from Broad to Conduit,* . . .	Dec. 8, 1894.

At the close of the quarter work upon the following sewers of the improved sewerage system was in progress, namely:

No. of resolution.	Date of approval.			
138.	Mar.	21,	1893,	*Norfolk and Station streets, Huntington avenue, Chambers and Burrington streets.*
564.	Sept.	23,	"	*Section* 10, *Allens avenue Division.*

Work upon the following lateral sewer was in progress at the close of the quarter, namely:

No. of resolution.	Date of approval.			
567.	Oct.	19,	1894,	*Eddy and Broad streets.*

Work upon the following sewers, completing the work ordered by the city council, had not commenced December 31, 1894, namely:

No. of resolution.	Date of approval.			
521.	Sept.	25,	1894,	*Canal and South Water streets, etc., Improved Sewerage System.*
616.	Nov.	20,	"	*Barton street, from Broadway to Westminster street.*
617.	"	"	"	*Brattle street, from Waldo to Lilac.*
619.	"	"	"	*Pomona avenue, from Academy to Pemberton street.*

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SEWER MAINTENANCE DEPARTMENT.

The following table shows the work performed by the department cleaning sewers, basins and drains for the year 1894.

Months.	Old Work.								New Work.							Total deposit removed, cubic yards.
	Old Drains.			Sand Catchers.		Open Ditches.			Sewers.				Catch-Basins.			
	Number.	Length in Feet.	Deposit removed cu. yds.	Number.	Deposit removed cu. yds.	Number.	Length in Feet.	Deposit removed cu. yds.	Number.	Length in Feet.	Deposit removed, cu. yds.	Dead ends.	No times examined.	Number cleaned.	Deposit removed, cu. yds.	
January	....	.....	.....	....	.....	...	.....	.....	1	600	.....	.....	1	466	409.65	409.65
February	..	.....	.....	....	.....	....	.....	.....	1	50	.60	.....	.....	81	69.	69.60
March	....	.....	.....	....	.....	1	175	29.65	31	14,700	30.05	1	2	311	311.48	371.18
April	....	.....	.....	....	.....	3	475	70.35	1	100	.....	.....	2	342	345.	415.35
May	....	.....	.....	2	6	1	150	33.27	41	6,900	21.90	50	1	327	330.20	391.37
June	....	.....	.....	....	.....	....	.....	.....	3	.....	.....	85	1	668	880.15	880.15
July	....	.....	.....	...	.....	4	500	105.20	3	.....	.....	.....	1	658	714.05	819.25
August	1	100	22.20	....	.....	1	.....	.....	16	2,000	5.48	70	1	1,364	1,281.40	1,309.08
September	..	.....	.....	....	.....	1	300	29.65	1	160	.....	.....	1	1,060	1,129.20	1,158.85
October	....	.....	.....	....	.....	....	.....	.....	.....	.....	.....	.....	3	1,082	1,035.10	1,035.10
November	2	375	70.35	....	.....	1	.....	8.93	.....	.....	.....	.....	2	954	920.12	999.40
December	....	.....	.....	....	.....	....	.....	.....	14	3,000	3.55	.....	1	466	376.05	379.60
Totals	3	475	92.55	2	6	12	1,600	277.05	112	27,510	61.58	206	16	7,779	7,801.40	8,238.58

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PUBLIC WORKS

Bills approved on account of sewers from
r 31, 1894, inclusive, was:

ONSTRUCTION:

.....	$22,505 30	
.....	80,391 46	
		$102,896 76

.....	$5,444 21
nt engineers.....	2,660 25
s.....	925 08
eservations.....	903 00
s, improved sewerage system.....	786 31
ting cement.....	377 95
Additional catch-basins.....	343 59
Sundries.....	221 76
Watchman at city wharf.....	54 00
Tools.....	70
Sewer in Abbott street, from Camp to Knowles.....	2,548 73
Sewer in Althea street, from Cranston to Dexter....	569 21
Sewer in Benevolent street, from summit near Cooke to Hope.....	463 51
Sewer in Burnett street, Adelaide avenue and Broad street.....	19 62
Sewer in Butler avenue, from Angell street to South Angell.....	426 30
Sewer in Eddy and Broad streets.....	4,934 02
Sewer in Gesler street, from Courtland to Almy.....	739 82
Sewer in Howard and Perry streets, Broadway, Eden and Bell streets.....	2,771 79
Sewer in Ives street, from north side of Medway to Waterman.....	370 66
Sewer in Medway street, from Gano to near Ives....	649 27
Sewer in Orchard and Fruit streets.....	1,130 71
Sewer in South Angell and East River streets.....	2,038 72
Sewer in Stewart street, from Broad to Conduit.....	313 31
Sewer in Wendell and Ellery streets.....	1,047 61
Sewer in Allens avenue Division, Section 10.....	15,121 75
Sewer in Allens avenue Division, Section 11.....	17,123 37
Sewer in Norfolk and Station streets.....	8,502 75
Sewer in Woonasquatucket river Division, Section 13.....	12,052 44
Sewer in Woonasquatucket river Division, Section 14.....	19,293 45
Grading Norfolk street, from Oak to Cranston.....	1,062 87
	$102,896 76

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For maintenance $8,249 08

Charged as follows:

Cleaning basins and sewers	$2,901 98	
Repairing basins and sewers	2,581 98	
Inspection of connections	856 16	
Cleaning and repairing old drains	508 41	
Salary, superintendent	390 00	
Barn expenses	333 78	
Tools	302 99	
Horses, wagons, harnesses, etc.	215 31	
Old freight house at city yard	75 00	
Cleaning private connections	64 40	
Sundries	19 07	
		$8,249 08

The *net* expenditure for construction of sewers to December 31, 1894, inclusive, was **$4,391,198 08**

The *net* expenditure for maintenance of sewers to December 31, 1894, inclusive, was **$625,398 17**

Bills deposited with the city treasurer for collection from October 1 to December 31, 1894, inclusive, amounted to $1,081 55

As follows:

Cleaning private connections	$89 25
Sewer material	992 30
	$1,081 55

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $1,149 40

As follows:

Cleaning private connections	$95 50
Repairing sewers	59 35
Resetting basin head	2 25
Sewer material	992 30
	$1,149 40

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HIGHWAYS.

Four permits to open streets were issued during the quarter.

November 5th, the proposal of the New England Steam Brick Company to pave Exchange street and a portion of Exchange place with vitrified paving brick for the sum of $2.49 per square yard, guaranteed for a term of ten years, was accepted.

December 1st the offer of A. J. Wellington, of Boston, Mass., to furnish a new No. 5 Gates Crusher, with engine and boiler complete, and to take in part payment therefor a No. 4 Gates Crusher, a Fuller Jaw Crusher, with engine, boiler, screen and connections thereto, was accepted.

December 1st, the offer of the Narragansett Improvement Company to lay a Trinidad Lake asphalt pavement in Gaspee street, between the railroad abutments, and guarantee the same for a term of five years for the sum of $2.65 per square yard, was accepted.

December 18th, the offer of Crabtree & Havey, of West Sullivan, Maine, to furnish and deliver twenty thousand lineal feet of straight granite curbing was accepted.

In addition to the general patching necessary to maintain the streets in good repair, the following work has been done during the year ending December 31, 1894, namely:

New streets built	37,000	lineal feet
Curbing set	54,706	lineal feet.
Streets rebuilt	7,300	lineal feet
Streets re-surfaced	62,200	lineal feet.
Streets graded	33,640	lineal feet.
Block pavement laid	26,350	square yards.
Asphalt pavement laid	10,611	square yards.
Cobble pavement laid	1,900	square yards.
Brick pavement laid	1,500	square yards.
Concrete gutters and roadways built	13,924	square yards.
Asphalt gutters and roadways built	1,940	square yards.
Concrete sidewalks laid	4,898	square yards.
Concrete sidewalks patched and top dressed	1,434	square yards.

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During the quarter statements of the cost of concreting sidewalks, with ten per centum added to cover the cost of assessing and collecting, were certified to the assessors of taxes, viz.:

Daboll street, from Public to Elmwood avenue	$73 [illegible]
Public street, from Broad to Elmwood avenue	294 34
Transit street, from South Main to Brook	94 00
Bucklin street, from Potters avenue to Earl street	161 50
Diamond street, from Cranston to Superior	128 74
Redwing street, from Elmwood avenue to line of N. Y., N. H. & H. R. R. Co	35 79
Planet street, from South Main to Benefit street	47 87
North Main street, from Star to Lippitt	277 93
Total	$1,0[illegible] 67

During the quarter the following work was completed:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.			
June	21,	1894,	*Howard street, from Westminster to Broadway.*
Sept.	6,	"	*Atlantic avenue, from Melrose street to Hamilton.*
"	20,	"	*Staniford street, from Blackstone to Willard avenue.*
"	"	"	*Promenade street, from Gaspee to [illegible] abutments.*

TO GRADE AND PUT IN CONDITION.

No. of resolution.	Date of approval.		
76.	Feb.	2, 1894,	*Blackstone boulevard, from Rochambeau avenue to East.*

TO BE PAVED WITH G[illegible]CKS.

780.	Dec.	3, 1892	[illegible]

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No. of resolution.	Date of approval.	
760.	Dec. 22, 1893,	*East street, from Tockwotton to Wickenden; and Wickenden street, from the west side of Hope street to the east side of East street.*
515.	Sept. 25, 1894,	*Promenade street, from the railroad bridge to Gaspee street.*

TO PAVE WITH BRICK OR TRINIDAD ASPHALT.

183.	Mch. 30, 1894,	*Pine street, from Beacon avenue to Broad street.*

TO BRING TO SUB-GRADE.

517.	Sept. 25, 1894,	*Abbott street, from Camp to Knowles.*

TO CONCRETE SIDEWALKS.

537.	Sept. 27, 1894,	*Pitman street, from Gano to Wayland avenue.*
537.	" " "	*Hayward street, from Linden to Pearl.*
537.	" " "	*Diamond street, from Cranston to Superior.*
537.	" " "	*Daboll street, from Public to Elmwood avenue.*
537.	" " "	*Public street, from Broad to Elmwood avenue.*
568.	Oct. 19, "	*Transit street, from South Main to Brook.*
568.	" " "	*Planet street, from South Main to Benefit.*
620.	Nov. 20, "	*North Main street, from Star to Lippitt.*
620.	" " "	*Bucklin street, from Potters avenue to Earl street.*

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No. of resolution.	Date of approval.	
620.	Nov. 20, 1894,	*Redwing street, from Elmwood avenue to the line of the N. Y., N. H. and H. R. R. Co.*

The following work was in progress December 31, 1894, viz. :

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.	
Sept. 20, 1894,	*Althea street, from Dexter to Cranston* :—roadway graded.
Oct. 18, 1894,	*Elen street, from Broadway to Bell street* :—curbing nearly set.

TO TAKE POSSESSION, GRADE AND PUT IN GOOD CONDITION.

Sept. 7, 1893,	*Harris avenue, from Acorn street to Kinsley avenue* :—nearly completed.

TO GRADE.

No. of resolution.	Date of approval.	
50.	Jan. 19, 1894,	*Norfolk street, from Oak to Cranston* :—in process.

TO BUILD BARN, SET UP STONE CRUSHER, ETC.

467. Aug. 6, 1894,	*City Yard, Henderson street* :—in process.

TO BRING TO SUB-GRADE AND PUT IN GOOD CONDITION.

518. Sept. 25, 1894,	*New York avenue, from Eddy street to Maryland avenue.*
518. " " "	*Indiana avenue, from Eddy street to Maryland avenue.*
518. " " "	*Ohio avenue, from Eddy street to Maryland avenue.*

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No. of resolution.	Date of approval.			
518.	Sept.	25,	1894,	*California avenue, from Eddy street to Maryland avenue.*
518.	"	"	"	*Vermont avenue, from Eddy street to Maryland avenue.*
518.	"	"	"	*Washington avenue, from Broad street to Maryland avenue.*
518.	"	"	"	*Massachusetts avenue, from Broad street to Maryland avenue.*
518.	"	"	"	*Virginia avenue, from New York avenue to Montgomery avenue.*
518.	"	"	"	*Maryland avenue, from New York avenue to Massachusetts avenue.*

The following work, ordered by the board of aldermen and city council, had not commenced December 31, 1894, viz.:

SIDEWALKS TO BE CURBED AND GUTTERS PAVED.

Date of order.			
Sept.	20,	1894,	*Charles street, from Ledge to Hagan.*
"	"	"	*Forest street, from Camp to Ivy.*
"	"	"	*South street, from Eddy to the river.*
Oct.	18,	1894,	*Ellery street, from Wendell to Chapin avenue.*
"	"	"	*Wendell street, from Messer to Ellery.*
"	"	"	*Willow street, from Messer to Ellery.*
Nov.	15,	1894,	*Abbott street, from Knowles to Camp.*
Dec.	20,	1894,	*Alma street, from Candace to Pekin.*
"	"	"	*Atlantic avenue, from Elmwood to Melrose street.*
"	"	"	*Evergreen street, from Camp to North Main.*
"	"	"	*Gordon avenue, from Public street to Oxford.*

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Date of order.			
Dec.	20,	1894,	*Hudson street, from Ellery to Huntington avenue.*
"	"	"	*Kossuth street, from Bowdoin to Putnam.*
"	"	"	*Taylor street, from Glenham to Chester avenue.*

To Take Possession and Remove Obstructions.

Oct.	18,	1894,	*Washington street, from Eddy to Walker.*

To be Brought to Grade.

Oct.	18,	1894,	*Hudson street, from Ellery to Huntington avenue.*

To be Paved with Granite Blocks.

No. of resolution.	Date of approval.			
516.	Sept.	25,	1894,	*Richmond street, from Ship to Point.*
614.	Nov.	20,	"	*Traverse street, from Wickenden to Pike.*

To Concrete Sidewalks.

620.	Nov.	20,	1894,	*Doyle avenue, from Camp street to Olney.*
620.	"	"	"	*Camp street, west side, from Olney to Rochambeau avenue.*

Bills approved on account of highways from October 1 to December 31, 1894, inclusive, amounted to:

Regular appropriation	$50,391 23	
Special appropriation	65,539 52	
Special credit appropriation	10,676 78	
		$126,607 53

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Classified as follows:

New brick barn—to build	$14,339 85	
Repairs on unpaved streets	11,379 13	
Cleaning streets	10,757 51	
Barn expenses	2,277 32	
Blacksmith and wheelwright shop	1,845 37	
Repairs on paved streets	1,781 82	
Tools, implements, etc	1,184 28	
Removing stone crusher and highway buildings to new city yard	1,030 66	
Removing snow and ice	743 22	
Salaries—superintendent and clerks	741 00	
Crushed stone—material and labor	603 12	
Repairs on stone crushers	549 89	
Horses, wagons. harnesses, etc	528 17	
Steam rollers—repairs and supplies	442 74	
Labor on materials	390 26	
Sundries	265 88	
Building driveways, etc	220 90	
Watchman at city yard	204 75	
Screening gravel	180 65	
Repairing sidewalks and driveways opposite public buildings	136 15	
Watchman at city wharf	56 00	
Fencing streets—material and labor	50 99	
Watering streets	50 00	
Office expenses—city yard	37 52	
		$49,797 18

New Work—Building and Rebuilding Streets, Etc.

Sidewalks Curbed and Gutters Paved.

Admiral street, from Whipple to Mowry	$6,298 06	
Althea street, from Dexter to Cranston	3,327 41	
Atlantic avenue, from Melrose street to Hamilton	2,521 52	
Canton street, from Regent avenue to Chalkstone	255 51	
Eden street, from Broadway to Bell street	681 17	
Forest street, from Camp to Ivy	450 00	
Howard street, from Westminster to Broadway	1,501 62	
Mitchell street, from Broad to Melrose	2,167 95	
Rutland street, from Elmwood avenue to Bucklin street	602 47	
Staniford street, from Blackstone to Willard avenue	960 46	
Union avenue, from Messer street to city line	4,159 44	
		22,925 61
Amount carried forward		$72,722 79

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Amount brought forward		$72,722 79
Pave with Granite Blocks.		
East and Wickenden streets	$2,301 04	
Olney street, from present end of pavement to Camp.	3,515 05	
South Main street, from Planet to James	2,654 20	
Wickenden street, from Transit to Brook	3,048 89	
		11,519 18
Pave with Bricks or Trinidad Asphalt.		
Clemence street, from Westminster to Washington	$149 02	
Pine street, from Beacon avenue to Broad street	21,372 68	
		21,521 70
To be Brought to Grade.		
Abbott street, from Camp to Knowles		1,342 55
To Grade and Build.		
Blackstone boulevard, from Rochambeau avenue to East		13,111 60
To Grade and Put in Good Condition.		
California avenue, from Eddy street to Maryland avenue	$262 52	
Maryland avenue, from New York to Massachusetts.	2,198 92	
New York avenue, from Eddy street to Maryland avenue	971 54	
Ohio avenue, from Eddy street to Maryland avenue.	901 15	
Vermont avenue, from Eddy street to Maryland avenue	1,017 28	
Virginia avenue, from New York to Montgomery	444 25	
		5,795 66
Take Possession, Grade and Put in Good Condition.		
Harris avenue, from Acorn street to Kinsley avenue		594 05
		$126,607 53

Bills deposited with the city treasurer for collection from October 1 to December 31, 1894, inclusive, amounted to $892 16

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As follows :

Labor and materials	$444 92
Use of steam roller	237 24
Manure from barn	62 00
Street sweepings	60 00
Removing trees	48 75
Discharging cargoes at city wharf	35 25
Chopping blocks	4 00
	$892 16

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $9,799 62

As follows :

Union Railroad Co., for granite blocks, etc	$8,990 20
Labor and materials	430 68
Use of steam roller	168 74
Manure from barn	62 00
Street sweepings	60 00
Removing trees	48 75
Discharging cargoes at city wharf	35 25
Chopping blocks	4 00
	$9,799 62

SIDEWALKS AND CURBING.

The expenditures on account of sidewalks and curbing from October 1 to December 31, 1894, inclusive, amounted to $11,675 28

Charged as follows :

Granite curbing	$10,687 41
Concreting sidewalks	987 87
	$11,675 28

Curbing bills deposited with the city treasurer for collection from October 1 to December 31, 1894, inclusive, amounted to $304 43

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During the quarter coupons from curbing bills collected have been returned by the city treasurer and receipted for, amounting to $447 43

CITY ENGINEER.

Bills approved on account of the city engineer's department from October 1 to December 31, 1894, inclusive, amounted to $14,077 61

Charged as follows:

Salary—city engineer	**$1,800 00**
Salaries of assistants	**11,203 75**
Salaries of clerks	**763 75**
Horse-car tickets, etc	**270 00**
Supplies—drawing materials, etc	**288 46**
Instruments and repairs	**39 40**
Sundries	**31 25**
Meteorological instruments and repairs	**9 00**
Telephone lines	**1 30**
	$14,077 61

Bills deposited with the city treasurer for collection from October 1 to December 31, 1894, inclusive, amounted to $5 32

As follows:

Set of sewer diagrams	$4 00
Supplies	1 32
	$5 32

During the quarter coupons from bills collected have been returned by the city treasurer and receipted for, amounting to $5 32

As follows:

Set of sewer diagrams	$4 00
Supplies	1 32
	$5 32

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BRIDGES.

October 17th, the offer of G. M. Freeborn & Co. for painting at Point street bridge was accepted.

October 27th, a contract for constructing new masonry piers and strengthening and enlarging abutments and wing walls at the site of the Central or Red bridge, over the Seekonk river, was awarded to John T. Tank and the same was subsequently executed. Amount, $23,210.50.

November 5th, the offer of the Smith Concrete Company to fill the joints of the brick pavement on the Burnside bridge was accepted.

November 13th, the offer of George A. Keach to furnish white oak lumber for the Washington bridge was accepted. Amount, $787.50.

November 28th, the offer of the Providence Architectural Iron and Metal Works to furnish and erect an iron railing and posts for the Stevens street bridge was accepted. Amount, $150.00.

During the quarter the following work was completed, viz. :

No. of resolution.	Date of approval.	
830.	Dec. 20, 1892,	*Francis street bridge, over Woonasquatucket river.*
215.	April 17, 1894,	*Stevens street bridge, over the Moshassuck river.*

The following work was in progress at the end of the quarter, namely:

No. of resolution.	Date of approval.	
48.	Jan. 19, 1894,	*New City Yard, Henderson street:* —to grade and fence.
511.	Sept. 25, "	*Red bridge, over the Seekonk river.*

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The following work had not commenced December 31, 1894, namely:

No. of resolution.	Date of approval.			
831.	Dec.	20,	1892,	*Oak street foot-bridge, over railroad tracks.*

Bills approved on account of bridges from October 1 to December 31, 1894, inclusive, amounted to $11,263 90

Charged as follows:

Acorn street bridge	$10 85
Barn expenses	98 32
Branch avenue bridge	1 45
Building at city yard	5 46
Burnside bridge	51 40
Central or Red bridge	207 67
Charles street bridge—to rebuild	79 10
Exchange bridge	2 32
Horses, wagons, harnesses, etc	24 72
Lumber, hardware, etc	91 49
Point street bridge	728 48
Randall street bridge	165 71
Salaries—Central or Red bridge	480 00
Salaries—Point street bridge	973 50
Salaries—Washington bridge	485 08
Stevens street bridge—to rebuild	6,914 45
Sundries	181 43
Telephone lines	13 50
Tools	114 29
Veazie street bridge	1 45
Washington bridge, near India Point	633 23
	$11,263 90

Bills approved for the construction of the new Red bridge, from October 1 to December 31, 1894, inclusive, have been paid from the special appropriation for that work, to the amount of . $630 57

Bills deposited with the city treasurer for collection from October 1 to December 31, 1894, inclusive, (for lumber from various bridges) amounted to $187 66

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During the quarter coupons from bills collected (for old lumber sold) have been returned by the city treasurer and receipted for, to the amount of $187 66

FILLING COVE BASIN.

Bills approved and paid from the appropriation for filling the cove basin, from October 1 to December 31, 1894, inclusive, amounted to . . $21,978 24

Charged as follows:

Gaspee street, from Cove to Promenade	$10,402 19
Promenade street, from railroad bridge to Gaspee..	6,900 07
Francis street bridge—to build.....	4,675 98
	$21,978 24

CONTINGENCIES.

Bills approved from October 1 to December 31, 1894, inclusive, for grading and fencing new city yard, Henderson street, have been paid from the appropriation for contingencies to the amount of $686 22

ROBERT E. SMITH,

Commissioner.

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